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ABSTRACT

Papers and summaries of discussions from an international seminar on higher education in Southeast Asia in the next decade are presented. The seminar had the following three principal objectives: (1) to critically examine the state of higher education in Southeast Asia against socioeconomic and political realities; (2) to discuss problems and development potentials of higher education in the region in the next decade; and (3) to suggest future roles and orientations of higher education in the region. After the opening address by Makaminan Makagiansar, the following papers are presented: "Higher Education Development in the Past Decade," by Howard Hayden; "Higher Education in Southeast Asia: Development and Prospects," by Ruth Wong; "Higher Education and Cultural Development," by Ungku A. Aziz; and "Higher Education for Development: Findings of Case Studies," by Sippanondha Ketudat. Appendices include the following: "Higher Education and National Development: Asian Regional Report," a program of the seminar, and a list of participants. (SW)

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HIGHER EDUCATION IN SOUTHEAST ASIA IN THE NEXT DECADE

Banphot Virasai
Editor

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HIGHER EDUCATION IN SOUTHEAST ASIA IN THE NEXT DECADE

Proceedings of the Joint RIHED and ICED-HED Seminar
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29 to 31 May 1976

Edited by

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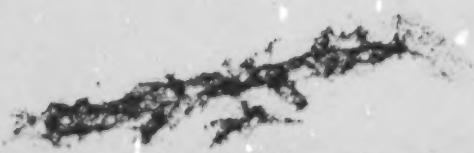

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PREFACE

The Regional Institute of Higher Education and Development (RIHED) is an autonomous intergovernmental institution. RIHED, founded in 1970, has a twofold purpose, namely, "to stimulate and facilitate cooperation among the universities and the governments of the countries in Southeast Asia", and, "to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole."

To fulfil the purpose, RIHED has performed several tasks including the setting up of a reference library, the conduct and publications of research projects, sponsorship or co-sponsorship of seminars and conferences, and the encouragement and facilitation of inter-university and inter-country cooperation. The Institute's activities are principally focussed on the contributions or bearing of higher education on the social and economic development of the countries of the region as a whole.

One of the Institute's main activities during 1976 was the organization of an international seminar on "Higher Education in Southeast Asia in the Next Decade" at the SEAMEO RELC International House in Singapore. The seminar was a joint undertaking participated by RIHED and the International Council for Educational Development with partial financial contribution from UNESCO. The seminar had three principal objectives, viz:

1) To critically examine the state of higher education in Southeast Asia against socio-economic and political realities.
2) To discuss problems and development potentials of higher education in the region in the next decade.
3) To suggest future roles and orientations of higher education in the region.

Participating in the 3 days deliberations were some 25 scholars and administrators. Papers presented during the seminar are reproduced here, together with summary of discussions.

It is hoped that the proceedings in this small volume may be of some positive contributions to the planning and implementation of higher education development programmes in Southeast Asia.

WELCOMING ADDRESS BY DR. AMNUAY TAPINGKAE DIRECTOR, RIHED

On behalf of RIHED and ICED, I would like to welcome you to this joint seminar on "Higher Education in Southeast Asia in the Next Decade". I am very pleased that ICED, the International Council for Educational Development, which is based in New York City, is represented here by Dr. Kenneth Thompson, Director of the Higher Education for Development Project and also by Dr. Puey Ungphakorn and Dr. Sippanondha Ketudat, members of the Asian regional study team. RIHED is ready to cooperate with other regional and international orgcnizations with common aspirations and similar objectives. This partnership with ICED is most welcome.

It is my great pleasure to express my appreciation to H.E. Dr. Nibondh Sasidhorn, Minister in charge of the Bureau of State Universities of Thailand, for his presence at this seminar. I would like to express my gratitude to Prof. Howard Hayden who, although retired from active academic responsibilities, has agreed to participate in these deliberations. As Director of the UNESCO-IAU research project on "Higher Education and Development in Southeast Asia," Prof. Hayden was instrumental in putting forward the idea of establishing the Regional Institute of Higher Education and Development. I am also grateful to all of you who have accepted our invitation to attend these brainstorming sessions. If there is anything else you would like us to arrange for you, please do not hesitate to let us know. Members of our staff are ready and willing to attend to your needs.

As an integral part of society, higher education is influenced and shaped by the economic, socio-cultural, and political realities that surround it on the one hand, and the teaching-learning environment and administrative infrastructure on the other. At the same time, the higher education system helps to shape the society within which it thrives: it gives direction to developmental needs of society, especially in societies where science and modern technology dominate the efforts towards national development.

In recent years the meaning of national development has gained a new perspective. Questions of ecology, social equity, and participation in development by the economically less privileged classes, now demand their share of attention along with the concept of simple economic growth in the objectives of development, towards which the efforts of the entire society are to be directed. These new perspectives of development should be reflected in the education sector, where the need is being felt for new educational policies that respond to new objectives of development.

The following basic ideas have been proposed as a framework for the goals of an optimal higher educational system:

(a) A future-orientated perspective that embodies the belief that the time-bias in education should be orientated towards the future;
(b) Life-long learning — a commitment to extend education on a

continuing, though intermittent, basis throughout the life-time of each individual, according to individual needs and abilities;

(c) Faith in participatory planning to harness the resources and willpower so that the difficulties inherent in this educational transition may be surmounted; and

(d) Development of socially sensitive and intellectually independent individuals who would merit our support for their right to exist in an environment that will encourage intellectual attainments to the fullest extent of their capabilities.

The goals of higher education for the next decade have to be viewed with respect to present developments. Southeast Asia as a whole has been undergoing rapid changes — socially, economically and politically. The educational system in the region must also be shaped and geared to cope with the new requirements of the times. As the general population increases at an alarming rate so do the student enrollments in institutions of higher education. Higher education policies and practices must be reviewed critically against these socio-economic, political and environmental changes.

In the face of new realities and challenges confronting the higher education system in the region, the Regional Institute of Higher Education and Development in collaboration with the Higher Education Development Project of the International Council for Educational Development has organised this seminar on "Higher Education in Southeast Asia in the Next Decade".

The objectives of this three-day seminar are to examine critically the state of higher education in Southeast Asia today against the current socio-economic and political realities, to discuss problems and development potentials of higher education in this region in the next decade, and to suggest roles and orientations of higher education in the Southeast Asian region. This seminar will highlight the formulation of guidelines for possible policy adoption for higher education development to serve the needs of the countries in the region.

During the three-day seminar four topics will be presented and discussed. First, Prof. Hayden will present a paper on "Higher Education Development in the Past Decade". Second, Dr. Ruth Wong, Director of the Institute of Education, Singapore, will present a paper entitled "Higher Education in Southeast Asia: Development and Future Prospects". Third, Prof. Ungku Aziz, Vice-Chancellor of the University of Malaya, will lead a discussion on "Higher Education and Cultural Development". Fourth, Dr. Sippanondha Ketudat will present the findings of the Asian Regional Team on the Higher Education for Development Project of ICED. The last session will be devoted to discussions on the roles and orientations of higher education in the future.

I am very grateful to Prof. Makaminan Makagiansar, Director-General of Higher Education of Indonesia and RIHED Chairman, and most recently, Assistant Director-General for Culture and Communication of UNESCO, Paris,

for agreeing to give an opening address at this seminar. Now, I have great pleasure in inviting Prof. Makagiansar to give his opening address and to declare open this seminar.

OPENING ADDRESS BY PROF. MAKAMINAN MAKAGIANSAR, CHAIRMAN OF RIHED

I would like to talk with you and to exchange thoughts with you, not only as academicians, as policy-makers, as teachers of universities, but most of all, as individuals who are responsible for the future of higher education in this region. We have just heard Dr. Amnuay indicating the salient features of higher education development which confront us today. He showed us how, within the context of RIHED activities, great attention is now being directed towards the impact of environmental factors on higher education. He also further indicated the impact of the desire to bridge the gap between the rich and poor, in which context higher education should very specifically and very precisely formulate its course in order to help bridge this gap.

We could add other factors which also determine higher education. But from the outset, I should make one point very clear and that is, that in the course of my own particular experience, in a position in which I was and am still responsible for decision-making in higher education development in my own country, I have found that oftentimes not only in Indonesia but also among the intellectuals in other countries there seemed to be a wrong assumption that if something goes wrong in education, this is the sole responsibility of the academic community of the scholarly world. This is not true, as we can see if we think in terms of the time budget of the child or of the student. If we just try to determine empirically how much time a student or a child spends within the walls of the school, then we will soon find out that this is only a tiny fraction of the 24 hours which is available to him during the course of one day. Education is not only the effect of the school environment but is also the effect of the external values whether they are social, cultural, political or environmental. I think this is a very important point to bear in mind, so that we will not stare blankly at the discrepancies and shortcomings of the educational system and then be left with a sense of frustration. Rather, I would reverse the ivew. I would rather say that in as much as education is determined by factors outside the educational system, it should be, first of all, the intellectual and moral duty of the educators to see to it that the school environment, a very important imput, should play a very dominent role in developing the personality of the child and in developing and preparing students to become full-fledged responsible adults in a responsible society. I emphasize this point because, as you all know and as psychology teaches us, if one starts with a wrong perception, one will end up with a wrong formulation of the problem, and if one has the wrong formulation of the problem, one will end up with the wrong way of trying to solve the problem.

Another point that is to be borne in mind within the context of higher education in the past decade, especially in our region, is that oftentimes higher education systems and the agents active within the higher education system have been reduced to being mere transmitters of knowledge. We have to remember and ponder that the university teacher is not merely a

transmitter of knowledge, but he is primarily a person who has been trained or supposedly trained and who is interested in educating young people. True education is to inculcate into these students knowledge and behavioural values conducive towards national development, as well as drawing out from the individual those potentialities, and those faculties, which enable him to become a responsible citizen within society. This point and the dual functions of the university teacher, as not only a mere transmitter of knowledge but also a pedagogue, are very important factors which will determine the outcome of higher education during this decade and the next. Therefore, I very much hope that during your discussion on higher education in the future and higher education in the past decade, you will take into account the factors which are first external to the system and second, those factors which give a certain uniqueness to the role of the university teacher.

Another point that I would like to raise is the rather curious tendency on the part of many of us, including myself, to apply nomenclatures and criteria appropriate to other settings to the present setting in Southeast Asia. For example, in the traditional political science which we have learned in the western world, and most of us have studied in the western world, we have been exposed to the concept of the juxtaposition between the government and universities. Perhaps in certain political settings, there is such a juxtaposition. In certain historical settings there has certainly been a juxtaposition or even opposition between the government and universities. But my question is "To what extent is it appropriate to apply this nomenclature to the analysis of the situation in our particular region?" I think we have to think hard about this.

Another assumption concerns the application of the concept of academic freedom, as if academic freedom which existed in the middle ages in Europe could be applied to the situation in our region. At the time of the middle ages, when the church and the state were united, the question of academic freedom was not so much a question as a fact, manifested in certain ways of doing things—behavioural manifestation of students and behavioural manifestation of teachers. But at the present time where the countries in the Southeast Asian region have to fight and struggle to maintain their national independence, these countries have to put their utmost into developing themselves so as to be able to feed and clothe the many millions of their population. In this particular age in which communication technology is so much advanced that it is not any more possible for us to live in isolation from one another, the basic question is "To what extent can one apply the traditional concept of western academic freedom to the situation here in the region?" I have no ready made answers for this question, but I would like to ask the seminar to give some very serious thought to these basic assumptions. After all, what is life? Life is nothing but the art of challenging one's own basic assumptions. If we do not continue challenging our basic assumptions in our individual life, and in our collective life as seen in our institutions, I think we might as well abandon the concept of the dynamics of society. The dynamics of individual life and the dynamics of society can be made possible only by constant efforts to challenge our basic assumptions upon which we base our thinking, our ideas, and our actions.

These are but some of the various factors which I think are too important to be discarded in the ensuing discussion which we intend to have on higher education in the past decade.

I would like further to bring to your notice that the present title of the brainstorming sessions of the seminar did not just come out of the blue sky. It is the result of many discussions, seminars, workshops, executive committee meetings and governing board meetings of RIHED. During those discussions it became clear that besides challenging basic assumptions, there is a need to reassess and evaluate all those things that have been undertaken by RIHED itself. It was found first of all, that there is a lack of linkage between the individual problems, and it was therefore proposed that for the next few years programmes should be designed which would clearly demonstrate the necessary linkages between those projects. It was also found that at our present state of development, although the situation differs from country to country, there is a need to give very great attention to higher education development as a system.

In talking with international colleagues I have often heard it said that the most important thing today is rural development and bridging the gap between the rich and the poor. Certainly as I have said earlier we all agree with this point, but then comes the very dangerous possible conclusion that perhaps higher education might not necessarily occupy first priority in development. I say this not because we are all in higher education, but because we know where the present leaders in rural development in the developing countries come from. In the progressive development in our member states, in Thailand, Malaysia, Singapore and Indonesia and also in other countries of the ASEAN region, we find that more and more progressive leaders will come from the universities. This was not true in the 1950's. In the 1950's those with a secondary education would suffice to become the leaders at different levels of society, but today, even in Indonesia there seems to be a trend towards having heads of villages who have graduated from universities. I think this is quite a progressive step, but this also means that higher education must be taken very seriously and not just given "second priority within the set of priorities set for education". I think it is very important to see to it that all of us will give thought to this particular concern, and that all of us try to formulate and clarify in what ways higher education is important. I think we should be realistic. It is very easy as decision-makers in our capacity as university teachers, as deans, as lecturers, as presidents, as advisers on higher education, as director-generals and as ministers to speak in nominative terms, "This ought to be done; that ought to be done". But then, of course, we all know that speaking in these terms alone does not suffice. These nominations must be translated into mechanisms and institutions which have a chance to survive in the particular setting of a particular society. Therefore, it is very important to see in what ways these statements can be translated into action in our own respective settings.

Higher education certainly today plays a very important role, because the leaders of tomorrow will mostly come from the higher education mills. Therefore, during this seminar I would like to suggest that appropriate atten-

tion be given to the role of higher education in the development process, not in terms of what we had discussed earlier in Vientiane, not in terms of the many various workshops held on the subject, but more in terms of "in what ways can educational development be related to the development process in general," in terms of trying to produce those leaders who will be responsible for the society. I have used the term "responsible leaders" here to refer not to those who are merely clever, for it is not only clever people who are needed for national development. If a country were manned by people who were excellent in their academic knowledge, I think this alone would not suffice. We need people who are also imbued with ideals and aspirations to develop the society. We need people who are imbued with the ideals of humanity, who look on their fellow-beings as brothers, who can look on their fellow-beings as people for whom they are responsible, and who can look on their fellow-beings with compassion. I think this is very important. The future of Southeast Asian higher education will depend on the extent to which we succeed in inducing that kind of knowledge which prepares individuals to adapt to change, and also on the extent to which we succeed in developing personalities with compassion for humanity. Without compassion for humanity, without compassion for the child in the village who has no chance to go to school, without compassion for the millions of children in our region, I think we will be just robots. We may become people who will be able to produce excellent technology upon which the world will look with awe and admiration, but this will not ensure human happiness in the region. Therefore, the major task of higher education today is that side by side with secondary and basic education, it should be able to produce the kind of leaders who will be able to raise the level of society beyond the present, and give to society hope for the future; because without hope and without determination all our concepts of the dynamics of society are useless.

These are only some of the points which we may discuss in the coming sessions. Permit me then, to wish you much success; permit me to offer my prayers that this seminar may be not just one of many seminars, but may have a unique meaning through which all of us will have retrospection, and through which all of us will reassess our respective roles in the development of higher education for which we are all directly responsible.

It is then my privilege to declare open this seminar on "Higher Education in Southeast Asia in the Next Decade".

HIGHER EDUCATION DEVELOPMENT IN THE PAST DECADE

Prof. Howard Hayden

I have to begin this paper with an apology. It has not materialized in the structured form which I had so carefully laid down. The somewhat stereotyped constraints of academic composition are no novelty to me, but judgement had yielded at times to sentiment, and clamant memories have put to flight the ordered ranks of my disciplined arguments: the terrain has been over-run by intermittent incursions of past struggles and old excitements. I was writing for a seminar in a context in which I had had every faith but which, I was equally sure would, a Sleeping Beauty with never a Prince about, remain dormant for ever in the pigeon holes of acting deputy under-secretaries and the dusty shelves of heedless and dispassionate librarians. In short, my contribution has emerged as an address, rather than as an academic paper.

The poet Wordsworth, writing of the French Revolution, cried "Bliss was it in that dawn to be alive, but to be young was very heaven!" This euphoric state would seem to have been equally prevalent among educational planners in the early 1960's, when the UNESCO-I.A.U. Research Study on Higher Education and Development in Southeast Asia was conceived. But how different the aftermath. The Revolution was rapidly if illogically transformed into an Empire—the enthusiasm of the planners has dispersed into the obscurity of mathematical models and engineering graphics.

The crucial year was 1960, when the marriage of economic theory and educational practice was finally consummated in the "Report of the Commission on Higher Education in Nigeria", the Ashby Report, which bore the inspired title of "Investment in Education". Here was a study directed by an educationist based on the findings of a manpower survey conducted by an economist.

Over-all economic planning was no new thing. Lenin had established GOSPLAN, from which the first of the great Five Year Plans had emerged as early as 1923, and perhaps surprisingly the United Kingdom was next in the field in 1929 with the Colonial Development Act, which eventually broadened in 1940 with the inclusion of Welfare in the title and the appearance of education, not as an investment, but as a necessary, if expensive service. France followed, led by Monnet and the establishment of the Commissariat au Plan, and in 1950 came the first of India's Five Year Plans.

All these plans relied upon the exploitation of natural and human resources to promote the growth of productivity, and dimly in the background loomed some awareness of the relevance of social problems, health, education and housing, generally grouped together as components of a single service sector.

Two main factors account for the recognition of education as an integral element of development—new concepts in economic theory, and the socio-economic and cultural problems of the developing countries which had achieved independence subsequent to World War II, without adequate means of facing the challenge of a world order based upon sophisticated technology. The economists had been attempting to quantify the contribution of education towards economic growth, having ascribed to it the major element in the 'residual'—that factor in growth remaining after accounting for the effect of capital, including natural resources and labour. You will recall in particular the work of Schultz, Solow and Dennison. Thus in 1961 we find the American Economic Review evaluating "the treatment of currently or potentially productive human beings as capital and/or wealth".

The leaders of the new nations found a dual purpose in education. The rapid expansion of tertiary education would provide the administrative and professional cadres desperately needed to fill the posts vacated by returning expatriates and able to promote the development of the country's resources; the quantitative expansion of primary education would offer to the masses of the country an early indication of their new strength and identity in an easily recognisable and welcome form. Of course it was not to prove as simple as that, and nobody seemed to have remarked that it takes from fifteen to twenty years to produce a graduate. But that is a different story.

It was in this heady climate that the Study of Higher Education and Development was initiated. A major planning tool, the International Classification of Occupations, had just been devised by the I.L.O. In 1961 an O.E.C.D. Policy Conference was held in Washington on Economic Growth and Investment in Education, leading to the multi-pronged Mediterranean Project. UNESCO was embarking upon its great series of Regional Plans, for Asia at Karachi in 1960, for Africa at Addis Ababa in 1961, for Latin America at Santiago in 1962. In our own field a Conference at Tananarive in 1962 produced the splendid report "The Development of Higher Education in Africa" with supremely authoritative papers in depth by Sir Alexander Carr-Saunders (so largely responsible for our presence in this university today) on Staffing and by Professor Jan Tinbergen on Costs. In 1963 the International Institute of Educational Planning was established in Paris, with a junior partner in New Delhi. The emergence of the new nations of Southeast Asia and the quickening of life in Thailand generated a welter of economic and socio-political problems in a region slowly and sometimes painfully becoming conscious not only of national identities, but of supra-national regional possibilities. But a common political ideology was not to be found.

The tensions of this situation, save in the political field, were not obvious. To the casual observer the immemorial rhythm of life in the paddi-fields, in jungle and forest, on the great rivers and among the archipelagoes, was scarcely interrupted. But in the cities, the ministries, and the universities, ferment stirred in the minds of men conscious of a new freedom and anxious to bring prosperity and an international status to their new countries. Industry was to generate the investment from which new developments would spring, and the standard of life be raised. But the application of tech-

nology to industry had previously held little significance for Asia, and there were no educational systems geared to produce an output trained to staff growing industrial systems in economies based upon primary products.

In this situation educational planners were, in general, working towards two objectives, the quantitative expansion of at least the first level of the system (a tactical error) and the output of trained personnel able to promote industrial development. In Higher Education the objective was the production of a growing pool of high level manpower in the fields of technology, professional services and administration. The missing figure here is of course, the entrepreneur—possibly he cannot be trained by conventional processes!

What may be called the vocational aspect of university education particularly in developing countries, and its relationship to the spiritual and cultural development of the individual, and the priority to be allotted to one or the other of these two objectives, has been much debated in the annals of RIHED, and at its first seminar the present Vice-Chancellor of the University of Malaya developed an image of Southeast Asian Renaissance Man—though perhaps even Leonardo da Vinci might have felt a little baffled in Bangkok or Djakarta today!

Such then was the background, both internationally and in my own experience, when I took over the Directorship of the UNESCO-IAU Study in 1964. I had already become convinced that planning missions were interpreting the goals of educational development much too narrowly. Accordingly one of the major aims of the study was to broaden the base of educational development and in particular to see all levels of education as components of an integrated approach to the future both of the individual and of the environment—using that term in its broadest sense—in which his life would be lived.

The project had been late in gathering momentum. I found that the logistical aspects—offices, equipment and staff—had been firmly established in Kuala Lumpur, largely through the hospitality and good offices of the University of Malaya, a very full collection of documentation on education in the region was in process of assembly (and let me add in parenthesis that the greater part of the collection is to be found in the RIHED library today) and much goodwill for the Study had been generated throughout the region by the tours of Sir John Lockwood, Chairman of the International Commission of Experts supervising the Study, and Dr. Matta Akrawi, its first Director. Mr. Guy Hunter had just completed his field work preparatory to preparing his report on High Level Manpower in the region, and we were able to exchange greetings as our paths crossed at Orly Airport in Paris. The consultant on language problems had yet to be found, and though my request for the appointment of a sociologist was approved no suitable candidate appeared—the Study is the poorer for the omission. And here perhaps I might make the passing comment that such an omission has been typical of so much planning. Economists have made themselves available in overwhelming numbers, sociologists have contributed comparatively little to concepts of balance in development and the anthropologists, always ready to

blame administrations for neglecting their services, have signally failed to relate their miniature field studies to broader situations.

But while the ground had been prepared no plan to structure the final reports, not even early drafts of such proposals, were in existence. However with the great encouragement and help of the Commission of Experts a structural design had been devised by the end of the year and a "Summary Report and Conclusions" was prepared and printed for two major conferences in 1965, the 4th General Conference of the International Association of Universities, and the Bangkok Conference of Asian Ministers of Education and Ministers responsible for economic planning.

By the 31st March in the following year, 1964, the deadline originally laid down, the Director's Report of the Study and Country Profiles of the nine Southeast Asian countries, two considerable volumes, had been completed, and the reports of the two consultants on Manpower and Languages edited, and the whole corpus of the Study forwarded to Paris for printing.

My colleague and deputy, Rafe-Uz-Zaman and I thought that there was no place in the Report for specific recommendations, which would need to be so flexible, to meet the individual requirements of each country, and indeed of each institution, as to render them of little value, though we did, at the behest of the Commission of Experts, draw up a list of major issues and conclusions which we thought might stimulate, and even strengthen the arms, of educational planners in the region.

We did, however, feel very strongly that to justify the thought and labour and time expended on the Study, not only by its small staff, but by distinguished academics and administrators from both within and without the region, and also the very generous financial funding of the Ford Foundation, we should endeavour to leave behind not only a review and commentary upon our theme in a few volumes soon likely to be engulfed in the floods of documentation pouring into universities and government offices, but a more tangible contribution to assist in solving the many problems raised by the Study.

A number of considerations soon emerged:

(i) Such a concept must transcend national boundaries, having a regional significance, yet it must also offer a particular service to each of the involved states.

(ii) Clearly the most practical way of achieving any sort of permanence, if such a condition is possible in this age, would be institutional in nature.

(iii) To be effective such an institution would have to work at the highest level of the administrative and academic hierarchies.

(iv) Above all it was necessary to create a catalyst whereby the administrative machinery of government and its political constraints and needs may implement the process of planning development.

In this last requirement would be found the crux of any institution we might conceive. It was all too simple to see the Study as a review of tertiary education, and pay just lip-service to the process of development. Perhaps the nature of our task would have been more apparent had the elements of our title been reversed—"Socio-economic Development and the Potential Contribution of Higher Education".

The relationship between universities and government has seldom been either cordial or placid. Governments are uneasy about such concepts as university autonomy and academic freedom: they pay the piper and feel they have every right to call the tune. They resent ex-cathedra academic pronouncements which may lack the pragmatism of political action—the art of the possible. They are wary of students intoxicated by the heady wine of independent thought uncushioned by a diet of experience. Academics, on the other hand, dislike situations in which they feel they have knowledge without power; they resent any suggestion of control either from within their community or, even more strongly, from without: they do not acknowledge authority—they are the authority. They are suspicious of political change, often considering it unmotivated by logical or informed thinking. Hence it becomes too easy to remain aloof, insulated by the traditional authority of academia from the policies which they term politics (and at this point I hasten to state that I have been both head of government departments and a university professor—and like to think that I am unbiased!).

Hence the insistence in the Report upon the need for the university to extend its thinking and teaching beyond the confines of the campus, and, I quote from the summary of dominant themes, "to extend its thinking whether by extension work or in association with government planning projects, in attempts to adjust the cultural and economic imbalance of the rural sector. A system of satellite centres attached to metropolitan institutions is outlined as one possible approach".

All of this does not mean, of course, that individual academics do not already play significant roles in government planning—the influence of the University of the Philippines at once springs to mind, but it is doubtful, for instance whether more than one of the diverse schools of economic theory is represented in government thinking at any one time—this is perhaps what is meant by a 'stop-go' policy? Such a practice makes little or no use of the university's capacity for inter-disciplinary team research, and for feasibility studies to be carried out with the minimum of delay. Some governments, it is true, seeking the expertise but, fearful of university pressure on their own prerogatives, have adopted the device of establishing their own research organisations, institutes or, to use a revolting but curiously appropriate metaphor "think-tanks", thereby creating a new type of scientist—natural or social—uneasily suspended between his academic traditions and his political masters.

It thus became necessary to conceive, on a feasible basis, both politically and financially, an institution capable of responding, however modestly, to the challenges which have been thus promulgated.

You are very familiar with the aims and objectives consequently drawn up: what is remarkable about them is that they have survived, with the one not very significant exception of the teaching and exchange service, practically unchanged from their first drafting to the present day, having passed the scrutiny of the International Commission, the General Meeting of the I.A.U., the Asian Ministers of Education and Economic Planning, the General Conference of UNESCO, the Ministries of the Participating Countries and the Board of the Ford Foundation, who proved as generous in supporting the outcome of their project as they were in supporting the Study itself.

At this point, in April 1966, with the completion of the Study, my official responsibilities ended, and I turned, in what purported to be retirement, to university teaching in the United States, Australia and New Zealand. I am thus able with decency to express my profound admiration for the work of the Preparatory Commission which explored the feasibility of the establishment of the Institute and enlisted, a remarkable achievement, sufficient support from nine governments to convene in 1969 the Founding Conference at Singapore which in turn secured the active and financial cooperation of seven governments and laid down the administrative and financial infrastructure of RIHED. I was privileged to attend the Founding Conference and also the first Workshop organised by the new Institute in 1971, and subsequently able to visit the Institute itself last year when journeying to Europe: you have also been generous enough to invite me here on this tenth anniversary of the sowing of that small seed at the University of Malaya, a sowing undertaken with deep conviction but much less hope of fulfillment. And at this stage I must say how greatly I have admired the work of RIHED's two Directors and appreciated their kindness in keeping me fully supplied with the publications of the Institute. It is often said that teaching is the worst paid and most richly rewarding profession in the world: with the second part at least of that apothegm I can fully agree.

We have now reached ground where you are much more at home than I. Since 1966 my work has centred largely on the teaching of educational planning, with some reversion to my earlier work in the South Pacific. Apart from the occasions I have mentioned, some training in Australia with young Indonesian planners, and two long stints in the Philippines as Consultant in Higher Education to the Presidential Commission on Education—a complex mission indeed—my liaison with Southeast Asia has been limited to a study of RIHED publications.

After the Singapore Conference there remained two basic operations—logistically the Institute had to be housed, equipped and staffed; and its objectives had to be pursued through a programme of activities. These, in their most succinct form, embraced the collection and publication of statistics, the diffusion of information, the provision of advisory and technical services, the holding of seminars, co-operation with other agencies with the same basic interests, and the promotion of regional as well as national co-operation between governments and universities in the planning field. The *modus operandi* has proved efficient, and the output has been remarkable for variety, and for the high standard which had necessarily to be achieved

and maintained.

Vital areas in manpower planning, management training, the infusion of technology into a traditionalist society, all of which are, or should be of immediate concern to governments, have been constructively surveyed and a variety of country studies should have aided the cross-fertilization of ideas in the region. An essential research tool, which surely only RIHED could have produced, has been provided in the admirable Directory of Scholars and Researchers—a tremendous development of the task begun with ASAIHL's Handbook of Institutions of Higher Education— and the image of the Institute has been steadily propagated by the RIHED News—which is surely deserving of an international circulation as an introductory guide to regional development for all students and scholars of Southeast Asian affairs. In this connection the news of a proposed RIHED for the Arab States, as announced in Vol. 2 No. 2 of the News, is surely a source of gratification and we must surely expect, possibly through the agency of UNESCO, fruitful contact, in methodology at least, between the two Institutes. A similar significance must be attached to the various invitations extended to the Directors to attend relevant meetings overseas.

There are signs in recent issues of the News indicating a move into the statistical field, though the proposed three-year integrated programme makes no specific reference to such a development. The need for essential quantitative material to be updated, complete and in a form which permits adjustment for regional comparisons to be attempted is stressed, as a basic material need, in the Introduction to the Study, and expanded at some length on pages 421/22 of my Report, which calls for a standardization of regional statistical procedure in the field of Higher Education, the collection of basic data under common definitions and terms of reference and the development of horizontal statistical compilations as well as the usual cross-sectional tables. Such information offers the basis from which all planning must proceed and the data for the adventures into systems theory which the Institute contemplates in Project 3 for 1976/77.

It would surely seem that RIHED alone is capable of devising a comparative statistical system, and what is equally important, of securing the cooperation of governments and private bodies necessary to produce an effective result. Both UNESCO and ECAFE at least have attempted the standardisation of technical data in wide fields covered by governmental statistical services but the detail necessary for our purpose and the multiplicity of sources from which information has to be drawn call for negotiation and the surmounting of a host of minor technical problems which the international agencies are far too occupied to undertake.

Earlier in this paper I had referred at some length to a concept of the Government and the Universities as partners—there are of course senior and junior partners—in the planning and programming of development. It is in this vital area that, in a judgement based solely upon documentation, progress seems to have been somewhat slow, though I hasten to add that obviously, without full government support there would have been no RIHED

at all! But certainly it appears that the universities figure much more strongly in representation at, and in the content of, the various seminars, than do the administrative services responsible for, or least needing, your specialist expertise; I think particularly of the approach in depth to the analysis of problems which can be made by inter-disciplinary research teams, and of their capabilities for assessing the possible ripple effects of new policies and programmes. If it were possible to study government problems and requirements not only from the uncommunicative anonymity of a position paper or plan, but through dialogue with responsible officers, I am certain such an approach would be of mutual advantage.

And now for the future. There are two great issues which seem to me to be of outstanding importance. One, mainly internal, is the problem of student relationships and militant student protest—the other, of universal significance (though I suppose that that could be claimed of the first also), is the role of universities in pursuing the concept of life-long, or, as I should prefer to call it, continuing education.

Let us begin with the significance of what is termed, according to predeliction, either student participation, student protest or student revolt. Even as I write the university students of France, as in 1968, are engaged in violent demonstration against the policies of a government tailoring tertiary education to economic needs, incidentally thus high-lighting a problem to which I have already referred, and with which I shall conclude this paper. Student revolt is nothing new. It was almost a common-place of the mediaeval universities of Europe, but it is not a peculiarly western phenomenon, as you are well aware. Thus in 1962 in Burma General Ne Win told the militant students of Rangoon, resenting academic failure then as they do today "I will meet da with da and spear with spear"—which turned out to be a considerable understatement. You will be familiar with the extensive literature, and probably with the experience itself. It would be curious if the young adult at the university reacting to the stimulation of an academic environment, did not question, as is the custom of the young in these days, the values of a social environment in ferment which he has inherited; and in his new and developed maturity, if his protests are disregarded he will resort to action. And in the new context of violence, one of the least happy legacies of the struggle for self-determination, this violence, in the confines of a campus, is only too easily diverted by mob hysteria until the original motive of the protest is lost in a violent clash with student power as the main stimulus. Many of the on-campus problems have risen from issues which could originally have been handled by the existence of a viable machinery—not a token gesture—for student participation at whatever level decisions are made, and by the careful timing of the response of authority to protest—the university after all is a community of students and teachers. Too often this opportunity has been rejected or neglected, and inspired or influenced by the mass-media to every type of violence; and conscious as never before of the strength of concerted action, whether by Trade Union, Japanese students or the social rejects of a Brooklyn classroom, we have become faced with the young intelligentsia of the nation—the source of its development in the years to come—displaying little but an atavistic reaction to the brute

nature of their remote origin. What are we to blame—our own intolerance of youth—or even change—the insecurity engendered by global threats of nuclear power or the breakdown of societies now based, not on the extended or the nuclear family, but on changing groups based on work or some other type of temporary association. We may even wonder whether the capacity of a time-worn and conservative concept of the whole educational process is capable of preparing a new generation for the strains of a world and its societies in crisis. Is our approach to the problem to be philosophical or pragmatic? Is the answer to be found in the churches, temples and mosques, in the family, or in the controls of a totalitarian state? I cannot help but think that in the clash of eager but ill-trained minds and the conservative academism of those who reject or ignore the aspirations of a rising generation lie both the source of great disquiet and also a 'point of no return' in the social tumult of a disorganised world. Is there a role, however modest, for RIHED in this dilemma? For example, whether the causes of militant student action are internal, or more widely based, the manner and frequently the logic of the protest or are generally such as to be utterly foreign to the basis and traditions of scholarship, and the fact that such a view would probably provoke nothing but derision from the dissenters merely emphasizes the point. Is it not, however, worthwhile trying to assess the effect of the abrupt transition from the somewhat restrictive regime of the rural secondary school to the liberal concepts of university life and teaching on the confused reactions of the newly emergent young man or young woman? Could we at least not rethink our first year's work, and include seminar-type courses on the element of socio-element development, on international relations in this field, and on the process of clear thinking—a useful adjunct to any branch of studies. And might we not also, without eschewing logic, spare a glance at the future? There is now more than enough valuable and respectable material in which to examine some of the speculations of the futurologists, whether our own approach be deterministic or not.

And there we must leave the students. You will recollect that the Study emphasizes the need for the university to dismantle its ivory towers and debouch into the hinterland, extending its image and offering its services not only in the cities, but also in rural areas desperately in need of expertise in the fields of agriculture, forestry and irrigation, of health, of education and of social organisation. To this end the Study suggested the device of satellite institutions of varying levels and types. The concept of study centres remote from the home campus is by now very familiar, as in the University of the West Indies and the University of the South Pacific with their extramural bases on the scattered islands of the archipelagoes they serve. In New Zealand, with a scattered population and considerable problems of internal transport, a new type of community college—virtually a small rural technical institute of limited range—is to contain tutors and facilities for undergraduate students whose studies by correspondence have hitherto been centralised in one of the seven universities. Within the Southeast Asian Region the organised participation of students in rural development has clearly been taken to considerable lengths by Malaysia, by Indonesia and by Thailand where the Mae Klong Integrated Rural Development Programme in particular offers a realistic and practical approach to rural problems at what

it is fashionable to call the 'grass roots' level—that is, the farmers. But the middle level cadres, the teachers, the hospital para-medical personnel, the government functionaries, are often leading lonely and discouraged lives—to them the stimulus of a university presence and its contacts would be something like re-birth; and a powerful element in development would be returned to active circulation in the communities they serve.

Most significant of all, however, is the concept of the Open University, a concept which must closely relate to the opportunities for co-operation and dissemination of information and material with which RIHED is familiar. Very regrettably I am unable to offer any views on the Thai experience in this field—Ramkhamhaeng University—but details will assuredly be forthcoming in great measure during the discussion to follow this paper. Certainly, however, the lessons already learned during the English experience, together with the problems of adaptation to national circumstances and needs, and the certainty of discovering new techniques in employing the concept, offer a splendid opportunity for analysis—to be followed by action.

The Open University at Milton Keynes was established in 1971—it has been fully documented, and doubtless you are all familiar with at least the main elements of the project; but for purposes of our future discussions a brief recapitulation may not be out of place. Basically it exists to provide a tertiary education for those who, whilst possessing the necessary ability, have been unable to profit from the existing system. Its method is to use the techniques of modern long distance communications (radio, television, specially prepared correspondence materials, written and graphic, and other audio-visual techniques) and supplement them with summer schools and local study centres, the whole operation centred in a single integrated approach. The modest skills mentioned in the Report are scarcely perceptible in this methodological galaxy. Faculties of Arts, Educational Studies, Mathematics, Science, Social Sciences and Technology offer a variety of one-year courses at each of four levels. Each course forms a unit, not more than two units may be offered in any one year, and a first degree requires 6 units, 4 of them at second or higher level: an honours degree requires 8 units of which 4 must be at least at second level, and two at third or fourth level. Studies are not confined to one faculty—the system in this respect is an extension of the method of organisation by School, not by Faculty.

Students are sent monthly packages of teaching material accompanied by assignments, and the course content is co-ordinated with B.B.C. television and radio programmes: special prominence is given on the television programmes to practical elements in the science courses. Some 250 study centres strategically located throughout the country are manned by counsellors and tutors with ample equipment available, and where television cannot yet be received special centres are furnished with films and videotapes of the programmes. Further contact with students is maintained by the corresponding tutors handling their assignments. Finally the student is required to attend a week's summer residential school in each of his two courses, these being held in conventional universities during their long vacation.

A service within the University itself is offered by the Institute of Educational Technology, which is attempting to develop an instructional system in which men, materials and machines are integrated. The staff of this Institute serve on all course teams, and are constantly constructing trial questions to evaluate the success of the marriage between course content, instructional material, and the nature of course assignments. Naturally, the Institute makes considerable use of its computer facilities. Some assignments are marked by machine working through the computer and a data bank is being built up from information from staff, students and employees to provide diagnostic analysis of different course segments and the use of various media.

To sum up: the system is able to

(i) bring the best available teaching material to the student in his home or simple study centre,
(ii) be capitalized to handle 40,000 students at a third of the cost required to establish a conventional university of 5,000 students,
(iii) deploy a relatively small number of highly qualified staff for a large number of students,
(iv) provide continuing education for an adult population which will continue to contribute to national productivity whilst studying.
(v) publish a range of carefully devised and evaluated teaching material which can be made available at reasonable cost to other parts of the world—and incidentally bring in a handsome revenue. (The success of this element in the complex has already surpassed all expectations),
(vi) surmount problems of terrain and distance. Possibly of considerable significance for some of us—broadcasting is not regarded as vital to such a system in view of recent and projected advances in the reproduction of visual material in recorded form.

I have dealt at some length with only two areas which I consider will have great future significance and in which RIHED should be able to fulfill its mission as communicator and catalyst. I mention in passing a number of other problems which might equally have held our attention for fuller treatment, and which may possibly crop up for discussion later in our proceedings. In this category I include

(i) The diversification of types of tertiary institutions, as suggested by Dr. Toh Chin Chye in a speech reported on page 6 of Vol. 2 No. 2 of RIHED News.
(ii) The future role of women in filling executive and professional posts, and the relation of this trend to Higher Education. Possibly a lead may be expected from the Institute of Education here in Singapore?
(iii) The development of Colleges of Education to deal with the staffing needs of pre-school, special and continuing education, and the relationship between these Colleges and the multifaculty Universities, where Departments of Education appear to be staffed by child developers who see children as case studies, not as the

essential component of an institutional complex—(the phrase is barbaric but accurate).

(iv) The problem of the educated unemployed, one theme of Dr. Pang Eng Fong's paper for the 1974 Vientiane Conference on Development Strategies and Manpower Needs.

And this brings us back almost full circle to the question of values in education. Where lies the essential purpose—in the happiness of a child—or the survival of a society. Are these aims complementary or polarized? Is there room for compromise—and if so in what terms? In the difficult economic and political climate of the region can a position be found, promulgated and maintained?

Speaking from a similar but even more precarious position President Julius Nyerere of Tanzania, introducing his first Five Year Plan, said categorically:

"This educational policy admittedly differs in the short run from the humanitarian ideals which attach great importance to moulding human minds and strive to have the greatest number of possible benefits from education as a source of moral enrichment and aesthetic satisfaction. Indeed it should be stressed that the results of this idealistic position are most frequently ephemeral and even become harmful to society as a whole when not accompanied by a simultaneous improvement of material living standards. With the available financial resources for economic and social development of the country as scarce as they are, the government has henceforth decided to pursue a policy of educational development in line with economic requirements."

More succinctly and dispassionately, the Robbins Report of Higher Education in England has just this to say:

"The goal of investment in Education is not productivity as such, but the good life that productivity makes possible."

We shall find, I think, a wider wisdom in Sir John Lockwood's Introduction to the Summary Report of the Study—

"The responsibility resting upon the institutions to be consciously and deliberately recognizing national needs in the planning of their activities is clear. Human resource development is a natural and traditional function of universities. In the context of the modern societies of South-east Asia, this function has to be construed and interpreted in the light of national goals at the present day. These goals are not restricted to the achievement of economic growth, and a purely economic analysis is therefore inadequate.

Inseparable from them are the social objectives, the cultural purposes and the working out of political structures appropriate to progressive societies. Teaching and research have a common part to play in the realization of these national aims. There is nothing in such an assessment of

academic policy to conflict with the traditional tasks of universities throughout the world in the transmission and advancement of knowledge."

And yet there remains an enormous academic haystack within which a man must seek to find the needle of his own self.

HIGHER EDUCATION IN THE PAST DECADE: A DISCUSSION

Subsequent to Prof. Hayden's paper "Higher Education Development in the Past Decade", the Chairman of the session, Dr Puey Ungphakorn, invited a number of participants to review developments in higher education in their respective countries during the past decade, and to forecast future trends.

MALAYSIA

The first speaker was Prof. Ungku Aziz, representing the University of Malaya. In Malaysia the most noticeable feature of higher education development during the past decade had been the rapid growth of universities, both in terms of size and of quality. The number of universities had grown from one to five, and whereas in the early '60s a maximum enrolment of 5,000 had been projected for the University of Malaya, then the sole university, it was now possible to envisage each of the new universities growing to a student body of perhaps 10,000. In terms of quality, there had been a noticeable emergence of able personnel.

The second major change had been in the legal status of universities. Whereas officers of certain British universities had adversely commented on the change as representing a loss of freedom, the speaker felt that the respective contexts of Western and Southeast Asian universities were too different for the same value-systems to be appropriate. In the West, universities had long represented an autonomous tradition, whereas local institutions were not in an affluent situation and had to cope with such problems as rural development. The most immediate effect of the new legislation had been increased stability on the campus and a correspondingly higher pass rate in examinations. The legal change deserved to be studied in detail through the law itself and its implementation, especially since most governments in the region had made some change in the legal status of universities during the previous decade.

Another major issue to tackle had been the restructuring of society. The impetus for this had been the racial incidents in Kuala Lumpur on May 30, 1969. The aim of this restructuring was to give a fair place to all racial groups in various sectors. The approximately 90 per cent of the Malay people who live in rural areas had in the '60s no access to secondary education, particularly in science, and so there were few children of peasants to go into such fields as medicine, dentistry, engineering and science, to become teachers and hence to provide potential university students. Clearly elitism could not be a realistic policy under these circumstances, and while the government had been helpful both in terms of providing a generous budget and in simplifying administrative procedures, it was obviously difficult to achieve the objective without sacrificing standards.

With respect to the language problem, the aim of using the national language as the medium of instruction had largely been achieved. However, the other aspect of the problem, of ensuring that students had a working

knowledge of an international language, i.e. English, had not yet been fully resolved.

While the above points applied specifically to Malaysia, another pertinent issue for the region raised in Prof. Hayden's paper was that of values: whether there was necessarily a conflict between educating an individual to be economically productive and his moral enrichment. The speaker felt that whereas the tenet of Western science, that definitions should be mutually exclusive, produced in those who had received a Western education a tendency to polarise, people in Southeast Asia did not necessarily start with the same Cartesian premises; those who had a Buddhist background, for example, would not.

Invited to look into the future, the speaker felt that while manpower planning on a broad basis was necessary, precise forecasting such as Mr. Guy Hunter's was of less significance for the coming decade than this issue of values.

Similarly, it would be necessary to redefine the role of universities and their relationship to government. Prof. Ungku Aziz went on to develop the analogy referred to by Prof. Hayden of Leonardo da Vinci as the type of Southeast Asian Renaissance man. Leonardo da Vinci, he said, had been a creative individual who was as much interested in technology as in art, and who lived at a time when his skills were required by warring princes. Similarly, the modern academic might be required to adapt to the demands of his political masters, and to produce what they required.

THAILAND

The next speaker, Dr. Sippanondha Ketudat, first reviewed developments in Thailand during the previous decade, and then went on to indicate future issues that would need to be resolved.

The development of Thai education fell into three distinct phases, of which the first, prior to 1960, might be characterized as the technician-producing period. Each of the five universities of that time was in fact a technical high school producing people in various fields such as medicine, agriculture, art and so on. There was no conflict between university and government because the universities were essentially departments of ministries producing graduates to work for that department.

During the second period, from 1960 to the early 1970's, there was a good deal of expansion accompanied by a search for identity and by confusion. More regional universities were created, giving a total of 13 universities and 80 two-year colleges. There had been some attempt at planning higher education growth according to certain economic formulae, and this together with the political pressure to provide more places had resulted in confusion. The solution had been to open Ramkhamhaeng University with an enrolment of 70,000 students, a number equivalent to those in the normal universities.

The third period, which began in 1975, could be called a period of reforms in which educators and social scientists had attempted to propose a plan for national education reform. It was as yet too early to assess its success, but the aims of the plan were two-fold:

(1) To provide more open access at higher and secondary level to those from rural areas.
(2) To stress the training aspect of education.

Previously, it had been the aim to train each individual to the highest level of his ability, but it had been realised that perhaps the individual gained more from this than society. Ideally, the student should be more socially-minded: the scientist should have social consciousness while—more difficult to achieve—the social scientist should be more scientifically minded. Referring again to the Renaissance ideal of the 'all-round' man, Dr. Ketudat said that universities should be able to train a man for a dual role, to be both prince and pundit—at times a decision-maker, at others an advisor. A man would need technical knowledge as well as entrepreneurial skills.

Looking into the future, the training aspect mentioned above was one obvious concern. Another was the movement during the last 5 or 10 years amongst both students and staff wishing to have greater participation in university government, in the election of heads of department, deans and rectors. Under the present Act of Universities, rectors were chosen by the University Council. Since the October 14, 1973 episode it had become apparent that a major change in the structure of universities was necessary for the future growth and development of universities in Thailand. With reference to Prof. Hayden's concept of 'life-long education', the Thai interpretation of this was that wider access to higher education should be provided.

PHILIPPINES

The next speaker was Dr. Emanuel Soriano of the Philippines. The most noticeable feature of higher education development in the Philippines, according to Dr. Soriano was the tremendous growth of population in higher education, from 400,000 a decade ago to 800,000 at the present time. Unfortunately, most students were still coming from the urban areas. The Presidential Commission studying Philippine education had generated many recommendations which were being implemented. For example, regional technical centres had been established, and a greater capability in food production and food systems was being developed, both with the assistance of the World Bank. At the elementary and high school levels, the development of teaching materials was being pushed, while the best scholars were being brought from all parts of the country to study in the Philippine Science High School. The results of the latter scheme were being reviewed. Other speakers had mentioned the 'rich-poor' gap in higher education, and the Philippine solution to this was the 'study now, pay later' plan, providing opportunities to children of lower-income families.

One distinctive feature of higher education in the Philippines was that it had been largely the responsibility of the private sector since immediately after the Second World War when it seemed to be a profitable business opportunity. Today, perhaps 90 per cent of the students in higher education were in the private sector. There were some undesirable features of this situation. For example, many institutions were still relying on tuition fees to support their operation, and this would mean a decline in standards. Other problem areas would be facilities, manpower and new teaching technology. In an attempt to rationalize this sector, the Foundation for the Advancement of Private Education had been set up. This organisation would attempt to see that obsolete institutions were phased out, and that obsolete areas of the curriculum were de-emphasized. For example, there were Colleges of Law producing far too many graduates who would later be unemployed.

Another organisations concerned with reviewing the curriculum was the Development Academy of the Philippines, established three years ago. Many institutions of higher learning were still following the traditional academic programme, graduating engineers, doctors and lawyers and hoping that these graduates would address themselves to pressing social and economic problems. This, however, was a slow process. It was not directly relevant to such critical development problems as population, rural development or mass communications. The Academy was to undertake research activities and training programmes directly addressed to these problems. The aim was to produce, not just managers in general, but those with management and executive skills in a specific field, such as the food production, public highways or fish production programmes. The initial results had been encouraging.

Another feature had been more significant support, both from the home government, as in the case of research for the agricultural programme, and from other countries. Thanks to this, it had been possible to develop some distinctive competence in management education. Institutions concerned were the University of the Philippines itself, the Development Academy of the Philippines and the Asian Institute of Management. Approximately one third of the participants in the latter institution's courses were from the region. Another area where competence had been achieved was agriculture.

Dr. Soriano then went on to discuss changes in his own institution, now known as the University of the Philippines System. This change of name reflected the decision, three years ago, to create a six-campus autonomous university system, intended as a contribution to the regional dispersal of higher education. This decision was prompted by a study which had revealed that during the previous two decades most students had come from the higher-income families, from urban areas and from the best high schools. This was contrary to the belief that intelligence was evenly distributed throughout the various socio-economic strata. Dr. Soriano then enumerated the various new units which had been established under the new policy. These were:

1. The Institute of Small-Scale Industries.

2. The Institute of Social Work and Community Development. This was formerly a department within the Faculty of Arts.
3. The Institute of Agricultural Development Administration.

This had grown from a review of progress in agriculture which had revealed that while technical expertise was relatively strong, the lack of managerial expertise amongst agricultural experts meant that the process of converting new technical concepts into ongoing projects was slow.

4. The Centre of Policy Research. This unit was intended to assist government in finding solutions to pressing problems. The new approach to the cooperative movement was an example of its work.
5. The College of Fisheries. This college was supporting the food production programme.
6. The Philippine Centre of Health Sciences. The centre integrated the development and coordinated the work of the Colleges of Medicine, Nursing, Public Health, the teaching hospitals and similar institutions.
7. The Law Centre. Its work was to ensure that existing law was not a hindrance to development aims. A notorious example had been the existing auditing regulations which were based on the assumption of widespread corruption.
8. The Institute of Mass Communications. Beginning with this institute it was hoped eventually to establish an open university which could bring higher education to the rural areas.
9. The Institute of Environmental Planning. This focussed on issues of physical planning, the Computer Centre. The aim of establishing this centre had been to develop research and administrative capability. Unfortunately, five years after its foundation, it was perhaps only 50 per cent used by faculty and staff.
10. The Science Education Centre. This centre was working on the development of teaching materials for the grade and high school levels, and many of these materials were already in use in the country's schools.
11. The Asian Institute of Tourism. This had been established to help professionalize the tourist industry. Singapore's success in this area had demonstrated how this non-traditional source of foreign exchange could aid the economy.
12. The Institute of Sports, Physical Education and Recreation. The aim of this institute had been to contribute to a richer student life. At present physical education was a required subject, but it was hoped that students would later feel encouraged to participate in club sports and recreation on a more professional basis.
13. The Programme of the College of Education. This programme had evolved as a response to the drop-out problem. A review of the pre-collegiate system indicated too great an emphasis on training students for college, whereas the aim should be to equip even those who left school after the 6th grade with some skill which would enable them to make a contribution to society and to feel that they had a definite role, rather than being considered drop-outs. It was hoped to extend this programme more widely in the Philippines.

14. The Faculty Development Programme of the University of the Philippines. This was a continuing concern, which was already achieving results. The aim was to develop institutional capacity amongst heads of units and faculty members, and to help those actively involved in the planning process to define their own contributions in the work of the University.

Dr. Soriano then identified the areas which would continue to be of concern. The first was the high turnover of people, which caused difficulties because of the increasing cost of replacing skilled personnel. It was still unfortunately true that both the benefits and the products of higher education tended to be concentrated in the urban areas, but it was hoped at least to increase the number of students involved in socially-oriented projects, especially those related to public welfare.

Furthermore, there was the problem of drying up of resources from abroad which meant that it was necessary to find means of generating these internally. Another problem was that of institutional capacity, where at the University of the Philippines, for example, only 4,000 of the 20,000 who applied annually could be admitted. It was not merely a matter of increasing the enrolment but of ensuring that those who were admitted were the ones who should be. The final problem, also one of capability, had been partly generated by previous success in certain areas. The University frequently received requests from the government for assistance. A recent example of this was a request to design a parking system for the greater Manila area. The present institutional organisation did not yet permit the processing of such demands on a large scale, but an attempt was being made to develop a response.

SINGAPORE

Representing Singapore, Prof. Phoon Wai On then reviewed developments in the Republic's higher education system during the past decade. Tertiary education in Singapore had also seen a great expansion during the period, and there were now about 15,000 students in the two universities, the Polytechnic and the Institute of Education. There were now about 2,500 students in Nanyang University, while the University of Singapore had grown from 3,000 to 6,500 students. It had also expanded in terms of courses offered; newer faculties established included Engineering, which, together with Medicine, attracted the cream of the students, Architecture, Business Administration and Accountancy. While Nanyang University, soon to celebrate its 20th anniversary, had also expanded, it still lacked professional courses. The Polytechnic represented the technical aspect of the higher education system, while the former Teachers' Training College had become the Institute of Education.

Returning to the University of Singapore, Prof. Phoon briefly reviewed its history and outlined plans for future development. The University had grown from a number of colleges, such as the College of Medicine, established in 1905 and Raffles College established before the war, so that there were at present about six campuses. A new construction scheme aimed to bring these

altogether in one location at Kent Ridge. A number of faculties had already moved, but the Faculty of Medicine, which Prof. Phoon represented, would move last after the building of a teaching hospital. Structural unity in terms of a common location was expected to be achieved by 1985. This alone, however, was not enough. The academic community and the administration were concerned about the functional relationships between the various faculties and departments. This would require proper planning. Educational techniques were another area of concern. Formerly there had been a widespread belief that university staff did not need to learn how to teach Recent Knowledge had invalidated that assumption. The University would therefore stress both the evaluation of teaching techniques and familiarity with modern teaching technology such as Audio-Visual Aids.

The number of local staff had increased. In the Faculty of Medicine, for example, the staff were almost all local, but in other faculties such as Engineering there was still a heavy reliance on foreign staff. It was hoped to overcome this in the near future.

The period had also seen closer co-ordination with other bodies and especially with the government. The previous Vice-Chancellor of Singapore University, Dr. Toh Chin Chye, had been a Minister, as was Dr. Lee Chiaw Meng, the present Vice-Chancellor of Nanyang University. It was hoped to have joint degree courses with the Institute of Education and the Regional English Language Centre.

It had become apparent that the professions and ministries who were the consumers of the products of education had no formal channel of feedback, and so the Singapore Professional Centre had been set up to provide just such a channel. Over twenty professions were represented in this centre, and the aim was to inform the Universities what should be taught, so that they would not become ivory towers divorced from the needs of society. Government departments had also been brought into the planning of programmes, and this too would enable the University to fulfill better its role of service to the community.

Another problem was the selection of appropriate candidates, those who had the temperament and aptitude as well as the mental capability for certain jobs. Prof. Phoon, who had been personally concerned with selection, had found that interviews and references were not adequate devices, since in medicine, f[illegible]xample, a student, though amongst the cream intellectually, migh[illegible]ve the compassion referred to by Dr. Makagiansar necessary to make him a good doctor. Prof. Phoon suggested that all candidates should perhaps be asked to actually serve in a hospital for a period so that their characters could be evaluated.

Just as it was hoped eventually to staff faculties with local teachers as far as possible, so there was an attempt to provide locally courses which would lead to higher professional qualifications. In the Faculty of Medicine, courses were provided in clinical specialities such as surgery leading to the Master of Medicine, and in areas such as Public Health leading to the Master

of Science. This would mean that students had less need to go overseas to train in their specialization and that there was less risk of losing them. An additional benefit was that the course content would be more directly relevant to local conditions.

Prof. Phoon concluded by remarking that the University of Singapore shared certain experiences with other institutions represented. Like Malaysia, a new constitution for the University under which deans would be appointed and not elected had been proposed; the reconstitution of the rights of the Students' Union was also being discussed. However, since the change in the law was so recent and its implementation still in progress, it was too early to comment on its effects.

INDONESIA

The next speaker was Dr. Soedjana Sapiie. According to him, Indonesia had seen a tremendous increase in the student body, from 10,000 in 1950 to over 250,000 at present—an increase of 25 times in 25 years. Institutionally, there had been growth too, with the number of state universities increasing from 2 to 40 and the number of private institutes from nil to 323. These 40 universities were distributed over the huge geographical area of Indonesia with its unequal distribution of people and its varied stages of development, and the universities too varied in their development and capabilities. The same was true of the private universities.

Another great problem was the demand for places in the university. Perhaps 80-90 per cent of high school graduates wished to enter the university each year, and of these, the state universities could absorb some 30 per cent. Estimates of the rise in the rate of demand varied from 8-12 per cent per year. The resources to cope with this demand were limited, especially in terms of manpower.

It had also become apparent that a basic plan or strategy for the development of the higher education system was necessary, with strong priority allocations. Before 1950 there had been no attempt at planning; the university system in Indonesia had simply evolved. Educational planning began in earnest in 1969, when the first Five Year Development Programme was implemented. Unfortunately, during the early 1970s, each individual university thought only in terms of defining its own individual role, thus causing more headaches for the Ministry of Education. However, in 1973-74, the Ministry through its Director General issued a policy statement providing that both state and private institutions would in future be structured within one system. In 1974-75, there was a basic evaluation of the system, of its structure, its working and its performance. It was intended to issue a further document in 1977 which would contain a basic strategy decision on the management and development of the system within the next 10-20 years. Steps to formulate this strategy were now being studied.

Dr. Sapiie observed that in Indonesia, the relations between the government and the universities were favourable to development. Univer-

sities were now governed by a public law, but, historically, the higher education system had in fact evolved within various government structures. On the government's part, it was written in the constitution that education was a basic government function on a par with defence. This meant that basic resources had to be committed to education, and that it was the government's duty to organize, guide and administer the educational system. As for the universities, they in turn accepted their dual role as part of the government function and as part of the dynamics of society towards development. No inconsistency was perceived here, and the speaker himself, for example, had "one foot in Academia and one in the Ministry", and also had dealings with the Army and with the private sector. Although, of course, there were differences of opinion on such matters as policy formulation and priority assignments, essentially the academic community and the government viewed one another as partners. The University accepted that their programmes should be development-committed and development-orientated, while the government, as in the Philippines, frequently assigned the universities certain tasks. There was thus an absence of confrontation.

Economic development was necessary for educational development, and to this end, Indonesia had concentrated on one of the points mentioned in Prof. Hayden's paper—the development of the entrepreneur. This was one aspect of the universities' attempts to bring themselves closer to the rural areas, where some 'open', non-degree programmes were being conducted. The formation of an Indonesian entrepreneur class was seen as vital for development. Believing that entrepreneurs could be developed to at least a certain extent, Indonesia had set up the Development Technology Centre whose programmes were intended to equip the entrepreneur with the right kind of abilities and motivation. These included managerial capability, technology, and the relevant economic aspects. The scheme was receiving bank support. It was as yet rather early to evaluate the success of the project, but Dr. Sapiie said that he would be willing to communicate the results of the experiment later. If it was successful, it could perhaps be incorporated into the tertiary education system.

HIGHER EDUCATION IN SOUTHEAST ASIA: DEVELOPMENT AND PROSPECTS

Dr. Ruth Wong

It is just about ten years since the publication in full of the joint UNESCO-IAU Report on higher education and development in Southeast Asia. In that report, certain important conclusions with respect to both the quantitative and qualitative aspects of higher education were drawn. These need to be discussed in relation to the events which have actually occurred with the lapse of time.

Quantitatively speaking, the study highlighted a general imbalance between manpower needs and the output of institutions of higher learning in the region as a whole. This was the case with regard to both level and type of manpower skills required. Proportions between levels were unsatisfactory. For example, there was a tendency to over-provision at the managerial/professional level as compared with that at the vocational/entrepreneural/paraprofessional level. In terms of types of skills, oversupply was experienced in such sectors as the arts and social sciences and a noticeable shortage in the areas of the natural sciences and technical education. Vocational education at post-secondary level was yet to be properly expanded. Among the professional schools at universities, law faculties seemed over-developed almost everywhere.

Qualitatively speaking, there were heavy wastages arising from large enrolments being attended by low output. Among the contributory factors to this situation was the liberal policy applied to admissions to higher institutions—a policy determined more by basic qualifications rather than by a strict selection of pre-requisites. There was, too, the inadequate preparation of secondary school students for higher education due to a disproportionate concentration on a university preparatory curriculum to the exclusion of considerations which might be linked to more diversified vocational expectations. At the same time, production at the level of tertiary institutions needed a firm base for the maintenance of high quality. This, the rapid expansion at primary and secondary levels of education, during a period of popular demand for education, could hardly ensure. Lack of counselling for secondary students regarding vocational opportunities and lack of adequate planning further compounded the problem. Finally, an inadequate supply of quality teachers left its poor-quality stamp on the products at all levels. This necessitated the offer of remedial courses in some universities, a measure which diverted scant resources, both human and material, from more important concerns.

Throughout the Report, a strong note was struck, not so much for the further expansion of higher education as for a re-planning of its role, its purpose and content to bring about a development which would bear a closer relevance to the purposes for which education is provided in the first

instance—a development which cannot be divorced from the objectives of development in other sectors of the national effort.

A system of higher education anywhere is a major investment and its development cannot be left either to wanton preference or to a blind faith in traditional practice. What has happened since the publication of the Report? Has the scene changed? Have there been developments along the lines of some of the recommendations at least? These questions are even more important since the intervention of the oil crisis.

Table 1 shows the average annual growth rates of enrolment in higher education. Comparing the rates in the first half of the decade of the Sixties (covered by the Report) with those in the second half (a post-report period), it may be seen that growth rates did indeed fall in six of the countries in the region with a consequent drop for the whole region from an overall average growth rate of 12.4 per cent in 1960-1965 to 10 per cent in 1965-1970.

Table 1

Average annual growth rates[1] of enrolment in higher education in the Southeast Asia Region (as a %)

Country	1960-65	1965-70
Burma	7.0	15.2
Indonesia	19.5	11.1
Khmer Republic	31.0	9.3
Laos	7.3	21.4
Malaysia	9.5	5.9
Philippines	11.9	4.7
Singapore	11.7	–0.1
Thailand	–4.4	8.7
Former Rep. of Vietnam	18.0	14.1
Average growth rate for the region	12.4	10.0

If we omit the three countries of Laos, Cambodia and Vietnam where events, since the cessation of war, are bound to have introduced significant variations in the pattern of change, we find that of the remaining six countries, one (Singapore) had a negative growth rate and three countries (Indonesia, Malaysia and the Philippines) registered an average drop in growth rate of 6.4 per cent. Only two countries, Burma and Thailand, showed an increase in growth rate, and this at more than twice the rate in the previous half decade.

From the evidence, therefore, it may be suggested that enrolments at tertiary level have begun to be made subject to more selective control and that firm decisions may have been reached already about optimum limits beyond which enrolment figures would not be permitted to grow. In the case

[1]*Extracted from Table 1 on page 64 of* **Higher Education: International trends, 1960—1970**, *Statistical Reports and Studies Series, UNESCO, 1975.*

of Burma more recent statistics suggest that the university student population, which increased markedly from 20,555 in 1964-65 to 52,809 in 1971-72, is getting stabilised. The Burmese Government has declared its intention to limit the annual fresh intake into universities to 10,000.

In the Thai case, a strong social demand for higher education, despite the rapid growth in the number of universities and the increase in areas of study, forced on the Parliament a decision to create, in 1971 an open university. In that year, the enrolment at the Open University alone equalled the combined total of enrolments at the eleven other universities. Also, the Private College Act of 1969 allowed for the establishment of privately-owned colleges, although the establishment of these would be strictly regulated through a control which was to be exercised by the Bureau of State Universities. Thus the Thai enrolment figures show a 13.1 per cent increase.

The latter half of the decade saw also a decided effort made towards better planning in and for higher education. In Burma, a coordinating committee for higher education was instituted by the Office of the Prime Minister. Universities and higher institutions of education in Singapore and Malaysia which are almost totally subsidised by their respective governments have long been subject to a coordinated control. Where Indonesia and the Philippines are concerned, the presence of a strong private enterprise in tertiary education makes it difficult to exercise control and bring about coordination to the same extent as in the other countries.

Nevertheless manpower planning units have been set up in all countries and indications are that shifts in higher education are being made to meet the demands arising from areas of shortage. From statistics in Table 2 it may be inferred that such shifts have been quite significant in countries like Singapore and Malaysia where coordination is easier to plan.

It should be noted that the element of personal choice of subjects is still open to students, despite the control exercised over admissions. The social sciences may be considered a generally popular field of study. Figures for education courses tend to fluctuate depending on the needs of the moment. Such fluctuation may be caused by rapid expansion in the system or by a rapid turnover of trained staff in the education service due to the attraction of the inducements which the private sector vies with the public sector to offer. There are other reasons too for sudden shortages of teachers. In Singapore, for example, a shortage of English medium teachers has been created because of a strong shift in parental choice of medium of instruction for the children, a shift of choice from a language which is more akin to the home language to one which is perceived as the language of economic success and mobility in a technological society. Thus, though a period of stability in teacher supply was expected in 1970, the problem of shortage appeared at the turn of the present decade to be as formidable as ever. Despite careful manpower planning, redundancy accompanied the shortage.

Measures, which have been taken to meet qualitative considerations besides those of selective admission and more specific manpower planning,

Table 2

Percentage of Distribution[2] of Students by Field of Study in Each Country

Country	Year	Humanities	Edn	Fine Arts	Law	Social Sc.	Nat'l Sc.	Engg.	Med'l Sc.	Agri-Cult.
Burma	1965	40	4	—	1	10	22	9	12	2
Indonesia	1959	5	28	—	19	17	1	4	14	4
	1971	6	22	1	9	28	2	16	9	5
Malaysia	1960	4	85	—	—	—	1	8	—	1
	1966	12	70	—	—	1	5	7	2	3
	1970	25	20	1	—	16	15	11	4	7
Philippines	1960	13*	18	1	4	39	see*	9	13	1
	1965	16*	38	1	2	25	see*	11	5	1
	1969	19*	26	1	3	34	see*	10	4	1
Singapore	1966	11	37	5	2	12	13	12	8	—
	1971	9	10	7	3	17	10	37	6	—
Thailand	1959	2	6	2	26	46	5	4	6	3
	1965	4	15	2	24	31	4	5	10	5
	1967	6	16	2	8	33	4	6	13	7
	1970	6	25	2	7	27	5	8	11	7

*The figures for Natural Sciences are included in those for the humanities

have been in the areas of diversification of curricula and the promotion of a better relationship between secondary and higher education. With respect to the diversification objective, more non-university type institutions have been set up, noticeably in Burma, Malaysia and Singapore. Secondary education in its turn has received a hard look and more pronounced attempts have been made to define and distinguish the curriculum meant for those students for whom secondary education is terminal from that for students with potential for university-type education.

Remedial courses, nevertheless, continue to be offered at university level. These are necessary mainly because of the introduction of a new medium of instruction or because the existing medium of instruction is not familiar enough to those who receive it. The latitude left to personal choice in the pursuit of higher education brings also its embarrassments. It was seen in Table 2 that the social sciences have remained a popular area of choice and, in some countries, this faculty seems to attract growing numbers of students. In circumstances of rapid industrialisation, the graduates who turn to school teaching tend to be mainly those who have pursued the humanities or social science subjects. This has meant an oversupply of such teachers to schools. The consequent need arises of attempting to make "bricks with straw". At the Institute of Education in Singapore, remedial courses offered to graduates comprise the following:

1 *Applied Mathematics and Statistics*, for would-be teachers of mathematics who have pursued only pure mathematics;

[2]Ibid, Op cit pp 72, 73.

2 *Physics or Chemistry*, to would-be teachers of Physical Science with university training in only one subject or the other, but not in both;
3 *The fine arts (music or art) and physical education*, for graduates in the social sciences who have read subjects which are non-school subjects.

Such courses place a heavy strain on staff. But the problem is difficult to solve inasmuch as the university's service functions cover a much wider sector than teacher training.

Future prospects

I hesitate at this point to attempt to consider anything in the way of a prediction. The futurologist to-day occupies an uncomfortable position. The trends and indicators on which he relies for his predictions are not as easily discernible as in times less subject than ours to the vagaries of chance and change. It would be safer not to peer too far into the future, except to ascertain from time to time that the objectives associated with the provision of higher education were still acceptable even as the measures taken to implement them continue to be costly. It would also be more pertinent to consider what should not be set against the future than to hypothesise about what might be.

First, our respective countries, as may be discerned from the foregoing brief discussion of developments, are more and more concerned with the creation of a well-equipped intelligensia, able to contribute to sound nation-building, able to match, with the specific skills which they have acquired at institutions of higher learning, the needs of development within a technological society. In the case of Burma, for example, it was specifically stated, as an aim among others prescribed by law, that courses of instruction and training would be devised, in which foremost priority would be given to technology and science, so as to lead to effective vocational and professional pursuits[3]. Towards the same end, the Malaysian Government established the Universities of Science and Agriculture, upgraded the Technical College to university status, and developed more particularly the postgraduate courses in the fields of science, medicine and technology at the University of Malaya in order to effect a shift from an overemphasis on the humanities and the social sciences to science and technology. Similar shifts have taken place in Singapore, Indonesia, the Philippines and Thailand.

Society is expressly willing, therefore, to support a costly technically-oriented enterprise, and the State in most cases under-writes the expenses. The emphasis on the importance of acquiring utilitarian knowledge, a process very much related to training, may grow to the eventual exclusion of research, which embodies purely individual subjective experience. From time to time there are signs of a growing impatience with pure research. Even the subjective experience has to be tied in to a utilitarian motive.

[3]Burmese Education Law, 1964.

While it is clear that research that is too esoteric in nature can hardly be a priority in any country with immense problems of development, the lines are not clear as to what may be termed acceptable research. For much of what is applied comes through the unhurried addenda to basic research, accrued over years of patient observation and experimentation, without obvious connections with the world of action. Unfortunately research to-day, like everything else, has been technologised. It is often associated with the research "plant", which can be very expensive when set against the returns. It may be necessary for universities to consider how to adapt to limited means, without having to forego the right to the best individual insights which are still the *sine qua non* of true progress. The fact is that, even in the advanced countries, there is a growing tendency to regard the polytechnics as places for action and universities as places for withdrawal from action. In Britain for example, there seems to be a move towards a polarisation of institutions with the CATS (Colleges of advanced technology) extending their embrace to more and more types of professional training, the latest being teacher training, while the universities continue to enjoy the luxury of research. For the short term, this may seem ideal, but it may not be far-fetched to expect that, when the national purse becomes too slender to support all institutions on an equal basis, action-oriented institutions may claim much, if not all, of what remains in the purse. It may be important, therefore, that the pattern of specialisation discernible in the establishment of special universities in the region should not result in the attrition of institutions which may seem less profit-worthy in the utilitarian sense. This, however, should not be taken to mean that, where a proliferation of higher institutions of learning has taken place without clear purpose and where their establishment has been based on nothing more than popular demand, a proper evaluation of priorities should not be carried out and drastic reduction enforced.

Another problem which needs to be attended to has to do with the products of higher institutions of learning. There is increasing complaint that institutions of higher learning are large, impersonal and bureaucratic. The impersonality of life at tertiary level is quite obvious. I have been interviewing university graduates seeking admission to teacher training for the past few days, at thirty persons a day. But for a mere few, the majority confessed to not having participated in any extra-curricular activities during their under-graduate years. They had a lot of learning to do, so they claimed. From the experience of the staff of my Institute, university graduates on the course are found to be much more disoriented than non-graduates about values in life which have to do with community and civic-mindedness. The evidence here is that schools do foster through their classroom groups a sense of togetherness, whereas the universities have not done so. If nation-building presumes that our products should have the right attitudes for the purpose, then it should be our responsibility to examine how we can inculcate values in an age of facts. Otherwise, the great effort put into the provision of higher education may produce less than the desired returns. What are the alternatives to the tutorial system which may be beyond the means of universities carrying populations of more than five thousand? Or should there be more of less? Smaller institutions?

A third aspect, associated with the development of higher education, which needs clear examination for better results in the future, is that of manpower for tertiary-level institutions. Too frequently this is an afterthought to the provision of tertiary level education. The buildings are planned on the drawing boards, but the manpower is left to time and circumstance. In the volume, *Growth of Southeast Asian Universities*[4], the Indonesian account has this to say,

> "To meet the need of teaching staff, new staff members were recruited without any selection or a well-defined personnel development. The teaching staff composition in the academic field often does not meet the real need of the field concerned, which should be the case in a well-arranged academic situation. Some fields are overstaffed while others have a minimal number of staff."

Such a problem would be most common where institutions of higher learning are still in the process of being established or have been established in too rapid a succession. But, there is another angle to this problem which is not often taken up—that of the ability of the staff to teach. If the emphasis, as it is to-day, is on training in order to equip persons for specific roles in society, then a premium should be set on the ability to train. Teachers at tertiary level institutions have been exempted from undergoing pedagogical training by virtue of the argument that their superior attainments have already established their worthiness for their job. While this might be true in the days when university dons were filled with matter, facile with ideas, deeply interested in research and students were few enough in number for a "deep calling to deep" type of communication to occur frequently between the tutor and the taught, the situation to-day is vastly different. Students who are at the various institutions mainly for training are no longer homogeneously interested in ideas. They want the lines of instruction to fall clearly into place. Also, with the development of educational technology, other methods than the lecture could be used to enrich classroom teaching, particularly where the lecture notes are full of secondhand material culled from common texts and contain nothing that is original or peculiarly the lecturer's own. The contact time, too, between lecturer and individual student has become almost negligible. The ways and means of countering this ever-present threat of student anonymity should be explored.

The universities and other institutions in the region remain highly-examination conscious. The niceties of separating sheep from goats are carefully observed, though there is enough evidence in the research literature on educational measurement to cast a doubt over the reliability of the various evaluation procedures followed at institutions of higher learning. Do we allow a mark, sometimes a mere point, to distinguish the outstanding from the good, and so on, down the line, or has there been some thought addressed to the desirability of defining what outstanding achievement might be in terms of certain discernible characteristics. Perhaps it may be feasible at this juncture of development to consider the role of criterion-referenced

[4] *Amnuay Tapinghoo (ed.), RIHED publication, 1974.*

assessment, in place of the usual norm-referenced assessment, in determining who should pass or fail, or who should be considered outstanding or average. In the world of work, what is important is the ability of the individual to respond to a situation requiring his specific skills, rather than the particular mark or degree which he has acquired.

Finally, because we are Asians, we find it difficult to accept technological values in their entirety. We would like to repeat that man shall not live by bread alone. Is there a place for some form of study at tertiary institutions which should be made compulsory for all students — a study which will provide meaning to the action, a study which brings together philosophical as well as practical considerations, which is not just a study of the history of ideas, or the philosophy of ideas, but weds scientific inquiry to humanistic values?

In discussing the various problems above, I have assumed that the next decade will be one largely of consolidation rather than expansion. The continuing oil crisis will not make it easy for state governments to entertain grand ideas about status and prestige. Tertiary institutions will be viewed as having essentially a plebeian role. They will be required to get closer to the community and society in which they exist. It is with this in mind that I have discussed those issues which I feel will have a bearing on future prospects.

HIGHER EDUCATION IN SOUTHEAST ASIA: DEVELOPMENT AND PROSPECTS

A DISCUSSION

The third session began with the Chairman commenting on an observation from Dr. Wong's paper on the difficulty of predicting the future. Prof. **Hamzah** Sendut remarked that gamblers, astronomers, and of late, economists were prepared to do it, and that the speaker herself had indicated certain trends. Dr. Wong clarified her point by saying that she had been thinking less of the faith which could result in self-fulfilling prophecy than of the unpredictability of events which could upset our plans, one example of which was the effect of the oil crisis on industrial progress.

Dr. **Makagiansar** spoke on the role of futurology in educational planning. In Indonesia, for example, projections had been made on the basis of established economic theories, but any attempt to identify trends with the aim of making projections towards a given year was lacking. Assessments of the educational situation made on an ad-hoc basis and then compared with criteria set up in the past would necessarily be misleading. The policy-maker should instead try to identify trends and the direction of their development. Other techniques at present lacking in educational planning were those relating to the creation of the behavioural stereotype of the prospective leader through the educational system. While the demands of the job-market could not be ignored, in a country such as Indonesia with over 200 subcultures, a national identity would not emerge without deliberate fostering.

Dr. Makagiansar went on to state that more reliable statistical data were now available, than in the past. In Indonesia, an example, in terms of behavioural variables was the discovery that 65 per cent of the parents of students in the over 300 private institutions wanted their children to have a white collar job, preferably in the city. Such attitudes were not conducive to development, and it was hoped that they would be changed through the educational system.

Dr. Makagiansar had an opinion which diverged from Dr. Wong's when she stated that the presence of a strong private enterprise in tertiary education in Indonesia, Thailand and the Philippines made it difficult to exercise control. He said that this was not the case in Indonesia, where both sectors were to be subject to the same guidance. He acknowledged that the existing law which permitted any able-bodied citizen to set up an institution of higher learning and only obliged him to notify the government after six months was detrimental. However, accreditation procedures now made it difficult for such institutions to continue unless they were of a suitable standard.

Another theme raised in Dr. Wong's paper had been the diversification of higher education. In Burma, Malaysia and Singapore, there was general acceptance that tertiary education was not equivalent just to university education. In Indonesia it was again behavioural values that constituted a

problem, for until now, success had been measured in terms of achieving a degree. Obviously, this was a value orientation that should be changed, but had not been made an object of deliberate policy since it was self-correcting to a certain extent. As the economy progressed, people realized that the ability to work and earn was more important. Dr. Makagiansar concluded by suggesting that ways in which non-university tertiary education might benefit development in Indonesia should be explored.

Tan Sri **Ainuddin**, referred to Dr. Wong's concern that the adoption of technological values should not mean the sacrifice of humanitarian values. He felt that in the pursuit of individual success we should not lose sight of the concept of the brotherhood of Man. Answering her query whether some form of education which would ensure that the products of the system had the right values should be compulsory, he felt that it should, and cited the case of his own institution, the Universiti Teknoloji Malaysia, where Muslim students were expected to do Islamic studies and non-Muslims to study ethics.

Other issues which Dr. Wong's paper raised were the ability of university staff to teach and the examination-consciousness of universities. Tan Sri Ainuddin felt that mere lecturing was not enough. University teachers must also have pedagogical training to enable them to communicate with their students. Some training of this nature was given to lecturers in his own institution. While feeling that examination-consciousness was perhaps unavoidable, the speaker suggested that the examination system itself might be revised.

Dr. **Setijadi** took up Dr. Wong's point about the role of pure research in the higher education system. He felt that where higher education was less associated with traditional university training, research-oriented higher education might not be necessary. In Indonesia various non-degree programmes provided a utilitarian training. However, he felt that a desirable middle course would be to concentrate on utilitarian training during the first four years, though, this would not exclude, for example, the appropriate use of logic. Training in university-type research techniques should be reserved for suitable students who would continue their studies at postgraduate level. The drawback to this scheme was the present lack of trainers. The preparation of trainers would be associated with the Ph.D. programme, and it was hoped to provide about 400 Ph.D. holders with the required skills within the next three to five years.

Dr. **Amnuay** made an observation that several speakers had referred to the tendency to diversify institutions of higher learning, and informed participants that Unesco would shortly be convening an international seminar on this topic in Paris.

On the question of examination-consciousness, Dr. Amnuay expressed the view that this had permeated to all levels.

Dr. **Wichit**, referring to the question of whether adequate preparation for university entrance was given in the primary and secondary schools,

reminded us that while educational opportunities were unevenly distributed, it was unrealistic to demand a special quality in university entrants. Universities wanted to link themselves to national needs and objectives, but this would be of little avail unless we helped those who had at present no chance to enter the university.

Dr. **Boonserm** opined that we should consider the higher education system not in isolation, but rather in the context of a changing society. The increase in population, the greater demand for efficient management of resources, the use of scientific technologies and the rich-poor gap as features of the past decade constituted constraints which would continue to operate during the coming decade. The task was to define the role of the educational system under these constraints.

The discussion returned to the issue of futurology with Dr. **Soriano**'s suggestion that we adopt a practical approach to predicting future trends. Since the likelihood of projected development plans actually being implemented was to a certain extent a function of the will among administrators, an exchange of such statements of intention among participants would give an indication of what might actually happen. It had become clear during the seminar that there were many common problems faced by the countries represented. Dr. Soriano referred to a number of them, and outlined the Philippine solution to them. For example, in an attempt to narrow the rich-poor gap, his country had tried to change the student mix so that it would reflect more accurately the actual distribution of families by income groups.

Referring to Prof. Phoon's point about selecting students with the necessary social awareness for medicine, Dr. Soriano stated that in the Philippines within the next five years, no one would graduate from the College of Medicine unless he had served a year with the people. Dr. Sapiie had referred to the proliferation of universities and private schools and the need for better management of them. In the Philippines it was hoped to establish an efficient management information system which could keep track of such matters as faculty and student data, equipment and documents. There were other aspects of institutional capability which were common, and where mutual help would be an advantage. Dr. Soriano suggested the establishment of strong links between a small number of institutions which could exchange and compare their development plans, and so be in a better position to assess their own progress.

Dr. **Puey** endorsed Dr. Wong's plea that universities should not go all out for development in defining their role. University staff varied in their abilities, and those who were good at pure research should not be neglected. The issue of the potential conflict between scientific enquiry and humanistic values had been reiterated. Dr. Puey felt that 'the University' in the abstract could do little about values, but that individual teachers could, by setting an example in their conduct. On the issue of manpower, Dr. Puey felt it was essential that staff should be trained to teach. This training might include values and conduct.

A point raised by Dr. Puey was the need to develop independence of judgement and thought in university students. Speakers had mentioned the need for governments to 'guide' universities and students, but 'guidance' was often equivalent to 'control'. He added that too rigid control might force students to go underground, whereas too much freedom might allow student activists to get out of hand. Governments then should consider the problem objectively, while bearing in mind the need to develop independence of thought among students.

Dr. **Wong** replied to Dr. Makagiansar's comments by stressing that in reference to Indonesia, she had said that it was difficult to exercise control *to the same extent*, because the attempt to do so had started later than in some other countries.

Referring to her definition of futurology, Dr. Wong said that the role of the futurologist was a more difficult one than that of the pragmatist. The approach implicit in her paper had been that in looking ahead. We should try to identify present problems and consider the likely outcome if we did not take care of them.

Dr. **Zahir** felt that since higher education was in fact part of a much larger system, it was unrealistic to attempt to plan in one sub-system only. He added that we had reached the stage where all aspects of higher education development should be planned. Only when we had decided on the kind of society we wanted to have would we be in a position to make decisions on the role of the educational system in that society. This was difficult to do in a rapidly changing society. Since events in any country in Southeast Asia would affect events in neighbouring countries, the exchange of ideas might help to decide on a suitable course of action in one's own country.

Prof. **Phoon** then returned to the issue of futurology, saying that while this might indeed be a hazardous exercise, it was an occupational hazard for the educationist. He wished to stress that in order to plan for the future, we must know the present, i.e. we had to know how far our products were meeting the needs of the community. While it was useful to ask students to assess the value of their courses, it was far more useful to obtain the assessment of the consumers, the ministries and hospitals who received the graduates and were in a position to assess their performance. In this way, any necessary curriculum changes could be made. Prof. Phoon pointed out that it was not enough to plan once and for all. The assessment had to be an ongoing process, involving continuous monitoring and revision. He emphasized that the opinion of the community was sought, not only on the results of programmes, but at every stage in the planning process. Planning committees had only half their members from the department, the others being drawn from the community. In the field of occupational health, practising people as well as university staff were involved in teaching. These included representatives from management and from the trade unions. University resistance to such innovations had to be overcome if programmes were to be improved.

Dr. **Boonserm** reiterated his point that we should first try to identify the

changes taking place in society at large before modifying the educational programme.

Prof. **Saw** agreed that we should be looking at the totality of higher education programmes, which consisted of segments. He felt that our approach should vary depending on the nature of that segment. He felt that his role was purely that of a transmitter of knowledge, and that it was not his responsibility to be concerned with the use his students subsequently made of that knowledge. However, where government was providing the funds, the products had to be relevant to the consumers.

Dr. **Saplo** discussed the question of planning for the future. Whether he took the approach of the futurologist or the pragmatist, the educational planner had to remember that the effects of his advice to the decision-maker would be felt in perhaps ten years' time. Decisions on the priority to be given to different areas should therefore be made only after a careful study. Any major errors would become apparent in later years, and because of the investment involved, would also be costly. In particular we should consider the professions that would be needed as the country developed.

Dr. **Sippanondha** then informed participants of Thailand's approach to future development, which was not a deterministic one. While a solution was being sought to present problems, the next generation would be able to choose what they wanted to do. Looking towards the future, Dr. Sippanondha identified three major problem areas. The first was the widening of the rich-poor gap that was likely to result in countries whose development was rapid. We should try to find out how education could remedy this. Like Dr. Wichit, Dr. Sippanondha was concerned about the present inequality of educational opportunity which only served to discriminate against those from lower economic groups. The second problem area was the shift from a rural to an industrial society, which implied a migration away from the countryside, resulting in physical problems of health care and in problems of culture shock and the loss of cultural values. The skills to cope with such problems as these would need to be developed in the country itself. It was well known that while knowledge was universal and highly transferable, technology was not, because of the influence of cultural values. Finally Dr. Sippanondha referred to the inefficient use of natural resources, citing the example of the tin and copper mines where there was no recycling. Miners should therefore be educated.

Dr. **Soriano** suggested that we start by looking at what universities actually do. In the Philippines, the university had taken the decision to become an active agent of reform, at the same time being the creative centre of the Republic. The University of the Philippines felt that the creation of the free thinking, creative person as a source of new ideas was essential. By undertaking relevant research, the University would be in a position to make constructive social criticism, e.g. by assessing ongoing projects. With respect to development efforts, a look at existing institutions and programmes would confirm that they were linked to national priority programmes. Dr. Soriano outlined the basic approach to development in his country. It was expected

that, even assuming that the family planning programme were successful, the population would grow from 42 to 65 million in the next 25 years. Basic decisions had to be made about its distribution. Agricultural development would continue to be emphasized. Methods such as land reform, the cooperative movement and effective food programmes were designed to achieve the dual aim of food self-sufficiency and higher income in rural families. In industry, the stress was on the generation of employment through labour-intensive programmes, the regional dispersal of small-scale industries, and tourism. In so far as the University supported the government's premises, it linked itself with specific projects. Assuming, for example, that the Department of Public Works was veering away from capital and equipment-intensive road and bridge construction programmes, then the University must be prepared to produce civil engineers who were familiar with the skills needed for labour-intensive projects. In sum, the University would have a direct influence on the process of technology transfer and hence on the development process. Thus it was not a question of choosing between education and training, but of being selective in doing both.

The Chairman asked whether the liberal policy of open admissions might not lead to a situation where there were more thinkers than doers in society.

Prof. **Phoon** remarked that his own department did in fact aim to train people for specific functions. In his own field of health care, there were problems of delivery; needs had to be distinguished from demands, for those who were the most vociferous were not necessarily the most needy. Statistics showed that between one third and one half of the world's population never saw a doctor in an entire lifetime. In Southeast Asia medical facilities were inadequate to meet local needs. We should therefore consider how to improve the service. He suggested that universities should involve themselves with the entire problem, instead of merely producing doctors. At present nurses and para-medics were trained in other institutions. Traditional medical training might not prepare a doctor to serve in rural areas. Such a service might be better provided by someone who had received a relevant form of tertiary education without necessarily being a graduate. Prof. Phoon went on to express the opinion that education could not be separated from training at any stage. Even medical auxiliaries should be motivated by understanding the reason behind everything they did.

Dr. **Soriano** described the situation in the College of Medicine in his own university. Here one issue that had divided the younger members of the faculty from the more conservative ones had been the establishment of the Institute of Health Sciences in a remote location to serve the needs of rural communities. Graduates of this programme would hold the degree of Bachelor of Science in Rural Medicine, a programme which took only five years compared to nine years for the traditional programme. These graduates would be able to handle the routine problems of rural communities and could refer to other centres if need be. In any case they were far preferable to the present quack doctor practising in many such communities. Thus the University of the Philippines had got involved in rural health care.

HIGHER EDUCATION AND CULTURAL DEVELOPMENT

Prof. Ungku A. Aziz

The first thing I would like to deal with is the question of definition. Each person will make his own definition, but as I see it, the cultural development or cultural programme of any university or group of universities in a country will have to conform to national policy. I am talking about Southeast Asia. I do not see how, even in the name of freedom or autonomy, it is possible in this part of the world for a university to have a cultural policy of its own which is widely divergent from the cultural policy and cultural programmes of the government. That may be debatable, but that is how I see it. I have noticed in my trips around the world that some universities, in non-totalitarian countries that are religiously organized, require conformity to the tenets of their religion. In my view this is perfectly in order. But in these countries, in these universities, I do not hear any accusations that this implies a lack of freedom. Nor do I think there is anything wrong with this. But there is a tendency in some countries that practice one form or another of parliamentary democracy to feel that any cultural control of universities "sounds totalitarian". People making this criticism often just do not realize that within their own system there are universities in which the cultural policy tends to be guided by some particular line of religious or other thinking.

Indirectly, I think university cultural programmes must also be sensitive to what is going on in the region in which the university exists — not only inside the country but also inside the region. We are particularly concerned with the Southeast Asian region. So one has to be aware of the things which are common to this region, in art, in music, in epics, in drama, both classical and modern, and one should give some attention to these. There is no reason why one should not be interested in cultural features of other civilizations but one should have some awareness of indigenous culture, otherwise we will get the development of "an ivory tower culture". You must have met, as I have, academics who say "The only time I can enjoy myself is when I am in London where I see the ballet every night" or "I like to see French cinema. Only when I am in Europe or in America can I really enjoy films." I have written about this sort of people elsewhere. They can be a great source of tension, creating problems in the university. As staff members or graduate students they have sometimes lived for quite long periods—seven or eight years — in other cultures, and when they come back, they have this nostalgia for the time when they were seeing those marvellous modern films, exhibitions, or whatever it is, in western countries, and they feel that these things are culture. If you cannot reproduce this "culture" at the university where they are working, then they feel that it is "a cultural desert". This is a very sad thing.

Now, to the definition of my terms of reference. For purposes of my discussion I am going to leave out two very large influences on culture, i.e. religion and language. If members want to bring them up, I will welcome discussion. But in my exposition I will restrain myself to drama, dance, music and songs, fine arts, and creative writing. I think these five will give us

adequate material for discussion. Nevertheless, I do recognize religious facilities, programmes and activities in a university, and the whole business of language in cultural development. Both have a proper place in any discussion of interaction between higher education and cultural development.

Now, why should the university be involved? Occasionally, I have had to show our museum of fine arts to ministers of the government. I have had to find an answer to the question. "Why are these things not in the national museum?" My answer has been "Our cultural policy requires us to have these things — ceramics relevant to this region, textiles relevant to this region, paintings, and calligraphy (Chinese and Arabic), and many more things — because in our multi-racial and multi-cultural country these are not only part of the heritage of the different races, but also part of the common heritage that contributes to our country, Malaysia. We draw our sources from China, India and Arabia, directly and directly from the wider sources of culture that are interrelated with this area. And there is no point in just having all these things in a distant museum or in the archives. We feel they should be in the university where students can come into very frequent contact with them. Living with these things our students will be less likely to experience the problem of what nowadays is called the "crisis of identity" — "who are we?" and "where are we going?"

Some countries have more of this "identity" problem, some countries have less. I think the younger staff members in universities sometimes use this as an excuse for agitation. We must remember that those countries that are moving along rapidly, are subjected at the university level to very big waves of cultural influence from the west, which itself is in a state of cultural crisis.

Now, in these five areas which I have mentioned, what basically can the university try to do? To provide a framework for our discussion I am going to suggest that there are two things you can do. One is that you can provide opportunity for a large number of students to develop their capacity for appreciation or taste. The other is that you can give opportunity to students to perform, and you can encourage and assist at least some of them in active participation in cultural activities. These two things are separate really. They require separate treatment in practice and in our discussion here.

First, we will consider the development of cultural appreciation. The Director of RIHED said yesterday, "development of socially sensitive and intellectually independent individuals." I would think culture plays a very important role here, and there are things we can do to instill in our graduates some sense of values. A student who is filled up with, say, rock music, is going to be reduced in cultural level to a pretty low common denominator. By the time he is saturated with it even if he can hear much of anything, his sensitivity is reduced. If you hear something on the radio (most of us would not probably listen for more than two minutes) which sounds like the orang utan roaring in the zoo when either his mate is in another cage or he is very hungry, this is the kind of "music" I am talking about. You cannot distinguish any melody there, all you can hear is some rhythm. If you listen to it long

enough, you will feel as if it is taking over your heart beat or something like that. Then you are getting pretty near to the experience of the young — and you can make a decision to surrender or change the channel. If you want to see this, you can see it in such films as "Woodstock Festival", or any one of these big rock festivals. They will give you a picture of what it is like. You may even, if you want a sample, ask somebody to play you this kind of music. You will understand, if you see this film or you may even understand by reading what this does to young people. Because it is a youth culture, it is going to come to the university. This is inevitable. The university has to have a very clear policy on this — either you ban it or take steps to make it rather unpopular. To give you an example, we used to have a lot of discos. When I started eight years ago, we had so called dance parties, and the students would import one of these bands. Most of the lights would be switched off. There would be flashing lights to mesmerise people and anaesthetise their brains. There would be this pulsating music with the "orang utans" on the stage singing. Then it would be very dark. You would see or perhaps you would not see people sitting, because some of them would be on the table doing what was produced by this rock music. When my wife went as the vice-chancellor's wife to one of these parties she really exploded, "How can you allow this sort of thing in your university?" I said, "This is not my university. I only started working here as a vice-chancellor and we must be very scientific and objective and observe this, and later on we can do something about it." In those days we had participation and discussion — very democratic. So democratically, I said, "You can have the hall but I am going to switch the lights on." This destroyed about 80 per cent of the effect. They said, "How can this be done?" "If there is light on, there is no fun." It was not so easy to do what we had to do. We had a cultural policy to get rid of this thing, but we had to use technology to put on the lights. I can remember — I tell you this for the sake of amusement to show you how perhaps eccentrically I did things in those days — sitting with half the union committee and the whole of the committee that was organizing cultural festivals. We had big lights and switch boards in our Grand Hall which could seat 2,400 people, which has a stage 60' by 40' and which can take 4,000 people inside it when really packed. It is therefore very large. Having all the lights switched on and then having different lights switched off, I said to the students, "This is the level I would tolerate." They said, "Couldn't you switch off two more banks of light?" Then somebody representing the engineering students said, "We must go scientifically." I said, "Alright, we will go scientifically. We will look at the hairs on my arm. The moment I cannot see the hairs, then it is already too dark." So this is the hair meter system. They thought that it was very amusing. This was our effort to reduce the effect of the culture I did not want.

I also tried to introduce and give experience of the culture I did want the students to have. We played Beethoven concerts for a week every evening in each of our seven colleges or hostels which each had 500 to 600 residents. Every evening at around five o'clock there would be a recorded concert and somebody from the staff would go along and say a few words about symphony and so on. In planning this I remember one meeting with the president of the Students Union. I said, "One of the things we are going to discuss this evening is arrangements for the Beethoven festival." And he actually

said, and I cannot forget this, "What is Beethoven?" He was not being funny. He really was puzzled about what was Beethoven. "Was it some kind of a book or machine?" I assailed, "Surely you know who Beethoven is?" I explained a bit. Then they cooperated very well. In the end the whole thing went off extremely well, much to my surprise.

More recently, a graduate working in a newspaper had to translate a sentence from English to Malay. In the English test it was said, "He left with his dogs and his Beethoven." So, the English sentence was not very clear. It just said "his Beethoven" meaning, of course, his Beethoven music for listening to. The graduate translated it as "and his German car." He saw the word "Beethoven" in the sentence and figured it out that it sounded German. Maybe he had not seen one of those but the person being discussed was rich. Obviously, Beethoven was his expensive German car!

Now, this is a rather sad thing. In any civilization, in any culture it is sad if educated people have not had some contact with Beethoven. So I feel that we have to provide facilities in these five areas I have mentioned so that our graduates can become aware who Beethoven is and what Beethoven has to offer. And Beethoven is not all. I want the students to experience modern drama, to have tasted many cultural experiences. I want to educate people who can sit through a presentation of Shakespeare without the incentive of having to pass an examination, who can attend a poetry reading and feel that it has its moments of enjoyment and who can listen to their own national music and not complain that "this stuff is for old people and children".

I think the university has a very big role to play in this development of appreciation, development of taste and awareness. In our part of the world, we need to have a very great capacity to tolerate at least other people's music — not, for example, to say that Chinese opera music is "terrible". You don't know why all the drums are banging away, everything seems to be chaotic and so perhaps you think there is nothing in it. We need to have the ability to sit down for a while, or at least say, "Maybe I should listen to it." But you cannot really appreciate this thing unless somebody gives you an explanation. Then you begin to appreciate it and then you can "hear".

This willingness to hear is a characteristic of many of the Western countries — at least among universities and intellectuals. Some of us were in London for the Islamic festival. It was very interesting to see the kind of people who would attend the concerts of good Islamic music, who would listen very intently, and who appeared to enjoy them. They were mostly bearded and they looked shaggy. They were people who could not play these instruments but they liked to hear. The music was something esoteric, something they could normally hear only on records. Here they could see a man performing it. This is, of course, very necessary. We cannot be just saying, for example, "You should have an interest in music; you should have some cultural activity" and so on. We have to find some means through the university itself. As we are filling up their minds with knowledge and giving them the right academic experience and giving them some feeling of need to be socially useful to serve the nation, we must also have interacting with this some

policy that will make our students tolerant and appreciative of at least these five kinds of cultural activities that I have mentioned. In one respect the university is ideally placed. Most universities have some access to theatres to develop drama. Certainly you can buy hi-fi equipment and put it on to let people hear music, and you can encourage people in experiencing a wide range of cultural performances, and you can "play down" or "discourage people from playing" the kind of music that would destroy their sensitivity or blunt their taste. That is one side of my approach.

The second aspect of culture which I want to talk about is participation. If you have 1,000 students around, it is very likely that quite a high proportion can perform something or other. It is really tragic if these people have to say that "When I came to the university I gave up playing the violin because my neighbour complained." Looking back nostalgically, I remember when I was a student the Vice-Chancellor of the University of Singapore, Mr. Kwan Sai Kheong, was my neighbour student, my senior, in the room above mine. In the evening Sai Kheong played his violin. We knew it was Sai Kheong playing the violin from five to six o'clock. Most people would sit around there and listen to it. Nobody said, "Shut up!" How is it that nowadays very often when students come to university they give up playing an instrument, or they join a electric guitar group and play this cnronic rock music?

I believe that we should provide deliberately, as a university policy, opportunities for people who are interested in drama to act, who are interested in dance to dance, and who are interested in music to play. This is not for credit, but for pleasure and true education. There is another thing too that if people are participating in fine arts or in education, dance and music are often separated whereas they should be integrated; certainly when performance is on a voluntary basis they should be integrated. If students wish to perform we should be able to get good directors either among the staff or from outside, and we should be willing to spend money on this and to give them money for sets and so on so that they can act or participate in theatre group productions. Some will be managing the lighting or preparing scenery, or enjoying the experience on the stage, or joining in the dance, some of which could lead to stage presentation and some of which is just for the fun of dancing. And by dancing I mean in this case mostly traditional dances and certainly not rock dancing or dancing to rock music or whatever the name of the current craze may be.

I do not want to sound boastful but our dance group from the University of Malaya which was voluntarily formed by students, has met its needs because we have rather strict rules about what they can do. I know that in many countries many students would just say they would not have anything at all to do with the university if you are going to impose this kind of hard rules upon them. They would just run round singing and protesting at meetings, making a nuisance of themselves to show that they do not like what the university is doing. But our group formed themselves voluntarily. We got instructors for them and they have been to the Philippines and to Indonesia. They went originally to Indonesia for a two-week tour which later became a three-week tour and they stayed there for nearly four weeks. They went to

many universities in Indonesia. The people who went with them came back and said they were very well received. Now, we know that the Indonesian students can dance and their staff members are really many times better, but perhaps we were a little unusual in Indonesia. We were very delighted with this, and the students were delighted with this. This is a great encouragement to other students. This year people will be saying, "Yes, in previous years the group has been to the Philippines and last year they went to Indonesia which was a success." So this encourages people. Our students have also danced at various public functions as a dance group. This is encouraged by the university. They really get no credit for this, no time off, no academic credit in examinations, and no special preference. We help them in travel, of course, and we provide and pay for all the costumes, instructors, cassette tapes and all those sort of things which are necessary, and we provide places to reherse or to perform. I think this is important. Many of these students will become school teachers and as teachers they will continue this in the schools.

When I went as a boy to a rather simple school (even for those times) in Johore Baru, all the songs that we learned were English songs. We learned no Malay songs at all or any other kind of Asian songs, and people were doing Scottish dancing and all sorts of things like that. All these I am glad to say quite frankly have gone. We are now performing our own dances but there is a great need to develop the ability to perform really well and to know about the great variety of our traditional folk dancing. The graduates from our university will become teachers and administrative officers in districts all over the country. If they can take these cultural activities with them, I think this will be a vital part that the university can play in promoting cultural development and much more effective than having courses on cultural activities and doing research on them. Likewise, music facilities should be available to the extent that the students should be able to borrow expensive instruments — as, for example, Spanish guitars, violins and organs. In our case in Malaysia, we bought a full *gamelan* set so that students can play these instruments as an orchestra. We have our own instruments, and anybody who wants to play can join the group. I think that playing in an orchestra serves a very important purpose in personality development, besides providing an outlet for creative talent.

We have exhibitions of paintings throughout the year in the University of Malaya and sometimes we give talks and sometimes we just put up the paintings. And from time to time we put up a reproduction of modern art and then it is interesting to go and stand behind the students and hear them discussing among themselves. These exhibitions are mounted in areas where people pass by in fairly large numbers. In our case, we are very fortunate that the embassies compete with one another in providing exhibitions. We have in the University of Malaya a resident artist as well and he goes to many public functions. If he feels like it, he will paint and people will just crowd round watching him paint. His example encourages students to be art creative.

Another area I want to encourage is creative writing. I think it is very important to provide publication facilities for students who write poems, short stories and so on. The university can provide some outlet for this

through magazines, grants to magazines and so on. Sometimes we have workshops in which people come and discuss poetry, or discuss calligraphy, or discuss how to write novels, and so on, and these bring outside people who are well-known in their own right to be with students and staff members, and this serves a useful purpose. I can only talk from my own experience and if I appear to be giving you a trumpet concerto, I have to apologize in advance. But we are friends, and I would like to give you as my last example the poetry symposium which we are putting together at the moment. It stems from my feeling that blank verse, so called "sajak bebas" or free verse in the Malay language has gone so free that it just means sentences that are short. If you put a few words down, this is poetry. There seem to be no rules. There is some justification for calling "sajak bebas" free verse. I suppose that this is because the rules "have no rules," but I cannot see the purpose in this and obscurity has become really rampant. Recently, lots of these poets, males and females, have been given large prizes. I think the judges have been overawed by the obscurity of the whole thing. I have been saying that "Maybe in our traditional poetry, the rules are so tough that most people do not understand them and they cannot be creative." People say, "Well, there are no rules. Poetry means what just comes out, wherever it comes from." So we are having this symposium. We are asking people who are knowledgeable not only to talk about poetry, Arabic poetry which is highly structured, Chinese poetry from the Tang period with actual performance, that is declamation of the poetry as it should be, and Japanese Haiko which requires some awareness of seasonal changes — spring and autumn. We will show some films. We have put all this together, and we will be having this symposium in another couple of months.

It took me nearly six months to get different people to write the papers and to prepare the illustrations both with music and translations from the different languages. We will be able to say "These are the rules of this kind of poetry" so that our people who are creative in poetry and want to be critics at least can have an opportunity to look at other forms, and be aware that there are forms of poetry which have survived over hundreds of years, which presumably are good, and which have very strict rules. These poetic forms can be appreciated even though you do not know the language if you are provided with a translation and some explanation. I think a university exists to provide this kind of thing not for people who are taking poetry courses, but for people who are interested in poetry or who might be interested in writing poems and who have been thinking that because the university has a magazine in which you can write poems, all you need to do is make the sentences short and throw in a few words that appear to be related to love or clouds or something like that and leave it to the readers to puzzle out whatever poem it is.

So this is how I would work, and how I have been working with regard to culture. All these should add up to you. My view is that the university is for the benefit of the students, and the public. The creative and appreciative people in the public can contribute both directly and indirectly towards the realization of cultural development in the nation.

HIGHER EDUCATION AND CULTURAL DEVELOPMENT

A DISCUSSION

The discussion was opened by Dr. **Nibondh**, who stated that the universities should be clear about their role in cultural development, and the role of cultural development itself. He defined cultural development and culture in the broadest sense as a system of beliefs, norms and values. The reasons for cultural development, he elaborated from Professor Aziz's paper as:

1) Just for excitement, just to know Beethoven for the sake of saying that we know.
2) As a reflection of the real life situation — descriptive and evocative.
3) As an expression of emotional response to a situation.
4) As a basis of a system of values and beliefs.

Emphasizing the fact that the word culture included the concept of cultivation and roots, he suggested that it would be desirable to create a sense of mission, and an appreciation of the simple life.

Professor **Aziz** felt that a person who developed an appreciation of the art of any one culture made himself thereby a more sensitive person, and more likely to appreciate also the art of some other culture. In Bahasa Indonesia and Bahasa Malaysia "fine arts" was translated by the word "halus" with its meaning of fine, gossamer, minuscule, which would imply in the cultured person a greater sense of mission. The analogy might be used of a mind carefully combed and the finer instincts developed. This refinement would be opposed and destroyed by the diametrically opposite pattern of western rock music so that in place of the classical Asian attitude of respect for the teacher the introduced cultural effect would be one of "being as nasty as possible". Professor Aziz's contention was that whether by means of Beethoven or by using the national music or other forms, the university could provide cultural programmes and thus produce finer people with more sense of mission. But he added that the sense of mission produced might not necessarily be the one which the government and the university wanted.

Tan Sri **Ainuddin** asked Professor Aziz to account for his omission of religion and language, which Tan Sri Ainuddin felt were both very important in cultural development.

Professor **Aziz** emphasized his agreement that religion and language are both very important in cultural development, but he had intended that they would be considered during the discussion.

Professor **Phoon** deplored the fact that graduates with high professional qualifications often restricted themselves in their reading to textbooks, and turned to the television for the recreation which in earlier times would have been provided by literature. To counteract this tendency the university must provide a good library, not only in the main campus but also in the hostels. He

suggested that individual professors and lecturers could influence the students in the direction of general ready by example and discussion.

Dr. **Makagiansar** commented that culture was something more and deeper than drama, painting and its other manifestations. He stated that one of the most difficult tasks confronting mankind was the education of man to adapt to changing conditions. Society was in a state of flux, and comparing our present decade with the previous one we could observe not only that changes were occurring more rapidly, but also that there were different and new types of change. In view of this good education must prepare the individual to adapt to the changes confronting mankind.

Speaking from his own experience in preparing a paper on cultural policy for the Director-General of Culture in Indonesia, Dr. Makagiansar emphasized how difficult the problem was. He made clear the dilemma in which our societies find themselves, being committed on the one hand to modernization, and on the other hand to preservation of our social and cultural heritage. The commitment to modernization was a commitment to increase GNP, to amplify social and economic development, and to provide to all the people of the country the benefits of development on an equitable basis. This commitment carried an implication of acceptance of mass technology and what we might call "mass culture". The commitment to preserve our social and cultural heritage was a commitment to preserve and pass on to our children something which would give them an identity and a sense of belonging, without which the individual becomes susceptible to neuroses and psychoses. Dr. Makagiansar saw developing countries as caught in the dilemma of these two necessities — modernization, without which no country can rise from colonial dependence — and the need to preserve the cultural entity with its love and compassion making it both a source of pride and a resource to fall back on in time of crisis. He warned against the danger of antagonizing these two necessities. They should rather be accommodated to each other.

Dr. Makagiansar emphasized that the cultural policy for higher education should be directed towards doing two things for the student. One was to provide him with an anchorage in his society — with pride, security and identity. The other was to broaden his mind and induce in him an appreciation of other peoples' cultures.

Dr. **Puey** said that cultural activities within the universities ought to be sensitive to the cultures of neighbouring countries. Within Thailand, a country very rich in diversity of music, drama, literature and poetry, he felt that the role of the universities should be to perpetuate this national heritage.

Dr. Puey felt that cultural programmes need not conform to national policy. His view was that national policy would be, in effect, government policy, and this could lead to culture being used for political purposes, for factional purposes, and even for personal purposes.

Dr. **Zahir** said that works of the universities within the next decade should be synchronized with the cultural policy of the government. But he drew attention to the diversity of cultures within each nation of the region.

Professor **Aziz** stated that there were two possibilities. One was to try to create a "national culture" like a cocktail by mixing everything together. This would produce something that didn't taste like anything, and he was against it. The other possibility was to make people tolerant of each other's cultures. The university's strategy must be to expose the students to the cultures of the other races, leading them to tolerate, appreciate — and perhaps even participate.

With regard to cultural policy, Professor Aziz felt that the university cannot go against whatever is national policy. He said that any attempt to do so could only lead to tension and nothing useful would be achieved in respect of culture. He reminded his listeners however that there was a lot of university graduates working in government positions, and their ideas would inevitably influence the government's cultural policy.

Dr. **Sippanondha** felt that universities should not educate a man soley in appreciation of past glory and past arts, but should also inculcate ideas of the present and the future. He suggested, too, that the modern cultured man could not be compared with the classical renaissance man, for in our present times modern culture was intertwined between arts and science. He brought out the fact that our students would need to be told about "scientific culture". This was difficult. He said that while our present system had sometimes attempted to educate scientists to understand humanistic and social values, the system was quite weak when it came to trying to educate humanists and social scientists to have an appreciation of science.

Dr. **Ooi** expressed his opinion that the university should expose its students to as wide an experience and choice as possible. The universities were free of the profit motive which operated in the case of the mass media, leading them to spread those aspects of culture which would make money for them.

Dr. **Sapiie** spoke about the efforts in Indonesian universities to preserve the traditional forms of art, music, drama and culture, and to allow the students from different areas to experience and understand the traditional forms of other regions, he stated that at least in the matter of art and "rock culture", modern Western forms had been officially banned from the universities.

Tan Sri **Ainuddin** said that we have responsibility as parents and teachers to guide the students. Parents and educators must believe in and practise the traditional values. The whole of society had a role in thus offering an example, and the ideals offered in the university must be the same as those offered throughout the educational system and by the society. Otherwise conflict would be generated in the children and students.

Dr. **Wichit** explained that one of the four objectives laid down for Thai universities was "cultural preservation and development". It had been revealed in a RIHED seminar on "The Task of the University" that for most of the institutes of higher learning in Thailand this was a rather nominal objective. The main function of the universities had been, since 1962, to supply specialists, and this manpower objective and taken precedence over other objectives. The RIHED seminar had therefore given some attention to the cultural objective. As an outcome of the seminar the universities had been able to negotiate with the government planning bodies and to arrange that in future the development plans of the universities would be submitted, not only in terms of graduate production, but in relation to the four objectives with one separate section dealing with cultural development. Dr. Wichit said that some universities had since shown themselves to be active and concerned about their cultural function, but others were much less conscious of their role in this respect.

Professor **Aziz** felt that there should be a place in every university for a good bookshop, and bookshops should make available some of the vital books which had been written.

HIGHER EDUCATION FOR DEVELOPMENT: FINDINGS OF CASE STUDIES[1]

Dr. Sippanondha Ketudat

I am going to present to you the findings of a team of people in Southeast Asia.* Dr. Puey Ungphakorn was the leader of the team and its other members were Dr. Amado A. Castro of the University of the Philippines, Dr. O.D. Corpuz, President of the University of the Philippines, Dr. Yip Yat Hoong, the former Director of RIHED, Dr. Amnuay Tapingkae, present Director of RIHED, Dr. Selvaratnam of the University of Malaya, and myself, with Dr. Soedjatmoko of Indonesia as a consultant. This Southeast Asian study is one of three studies — the African study, Latin American study and Southeast Asian study — which were coordinated by Dr. Kenneth W. Thompson. The study arose out of the invitation of twelve major donor agencies concerned with higher education and development. I would just mention a few — Ford Foundation, Rockefeller Foundation, the World Bank, IDRC, CEDA, USAID and so on. Twelve donor agencies came to ICED (International Council for Educational Development) and requested that ICED conduct a study of higher education for development. Dr. Thompson thought that it would be more fruitful if the study were carried out by people from developing countries. So we planned from the beginning that there would be three groups: one group working in Southeast Asia, one in Africa and one in Latin America.

We had three major purposes in mind as we began. We wanted to learn about the characteristics and role of higher education institutions for development in respect of three participating groups — governments of developing countries, donor agencies, and universities themselves with their university administrators. We had to accept at the outset that many higher education institutions are not responsive to the needs of people in developing countries, and we posed the question "Is the contribution of higher education institutions less than what it might be?" Or in reverse as a second question "Can something be done so that the university's role will be more appropriate for development?". These two key questions we answered in the affirmative. So we went on in our investigation to pick out carefully 25 case studies, of which 7 case studies were in Southeast Asia, and the rest in Africa and Latin America. The extent of the contributions from these 25 case studies varies greatly, but some ideas, which have been tried out and tested by individual higher education institutions, were disseminated to the others. We felt that understanding of the cultural processes in individual countries was needed for these studies, and therefore the studies were carried out by people of developing countries themselves.

There were many more questions that we raised and tried to answer in our study. Let me just mention a few. For example, what can higher education institutions do for the fundamental needs of the society in a country? The dilemma in developing countries is that programmes of education must be

[1]For text of *Higher Education for Development: Asian Regional Report*, see Appendix I.

*Thompson, K.W., Fogel, B.R. and Danner, H.E. (1977), *Higher Education and Social Change*, Praeger, New York.

placed in the context of the society's needs and must interlock with well-conceived development plans. There are many higher education institutions that have consultancy centres which offer assistance to small farmers for health delivery, for experimental farming and for a myriad of other development problems. Our original thought was that higher education institutions in which we were interested would have this kind of programme. The case studies that we looked at consisted of higher education institutions of various types — the technical college type, the general university type, the specific university type (as opposed to the broad type of university). So having picked the institutions we focussed on the problems which I have mentioned.

We found that one of the principal obstacles to development is the university and its administrative structure, which in many cases is obsolete. And especially with the increasing demands for development the structure of the administrative system often seems to be outmoded.

Another problem that we met was that outside experts are often sought by the universities and by the home countries while there are well-trained leaders within the country — well-trained leaders who are not yet recognized by their own people.

Another significant thing that we found that has been mentioned in this seminar was the work study or service programmes of higher education institutions. There is a significant attempt by many universities to have work study or service programmes. But the work study or service programmes of higher education institutions are often delayed by the resistance from some faculty members and by people in the government also. There are many faculty members who are somewhat old-fashioned so that they cannot accept that the way to teach our students can be anything other than to put them in the classroom.

I will now discuss the findings of our seven case studies in Asia. First of all, we had to set out what we meant by development because different people give different views on development. Our view was that development is many times and very often viewed as that state or condition that has already been attained — as for instance, one sees in "developed nations." Perhaps this view of development is biased in the direction of material or economic performance. Economic efficiency is, of course, an important aspect of development for it attests to a level of performance, innovation and organization. Nevertheless, human communities are not merely machines for producing material objects and related services. A human community is an association of human beings and the conditions of development cannot therefore be rightly viewed except in terms of human welfare or well-being. So our view has been to regard development as a process rather than an attained state or condition. In this view development is necessarily a continuing situation. All the nations on this planet are at some stage in this development process. The course of development is not simplistically uni-directional, but is affected by the vast range of aspirations and constraints among the various nations. But even though the development process is not uni-directional, it is not confused or undefinable. Our view of development includes three

elements. Briefly stated it is the process of increasing firstly, modernization of the economy, secondly, the efficacy of the social mechanism in the management of consensus and conflicts, and thirdly the paramount objective of securing, improving upon or adding to human well-being individually and as a society in relation to the environment.

Let me go back to our definition of the general background, that is the role of the university. We do feel that higher education and development are proper approaches towards increasing the capacity of the nation to produce more of those material goods that make human life pleasant and rewarding. But the university must also be concerned with justice, morality and human dignity. Higher education and development must likewise be regarded as approaches towards the liberation of people from various constraints, for example, the constraints of ill-health, ignorance, poverty, unemployment, run-away technology, and all the other factors that prevent them from becoming the truly human beings they are meant to be by their human nature. In this context we encountered a diversity of ideas — the classical view and the more modern view. The classical view is to preserve, transmit and increase knowledge, and we consider that this classical role of the universities cannot be neglected. In the developing countries of Asia, some of which have had little scholarly tradition, these functions must be pursued more assiduously than ever as part of the process of raising the level of the nation's intellectual and therefore economic, political, social and cultural development. Because of pressures from governments and societies, the scholars in the university may be forced to devote their research efforts to immediate problems, but even in a developing country basic fundamental research must be carried out, for this in the long run may be more important to public needs. A university commitment to intellectual excellence is its primary and most significant contribution to a developing nation.

Now I shall come to the gist of the case studies. The seven case studies in Southeast Asia essentially focussed on five major social questions. These questions are: 1) How can the development needs of rural areas and in particular, the small farmers be met? 2) How can poor urban families receive better health care, education, housing, recreation and job opportunities? 3) How can effective health services and agricultural technology be brought to rural areas? 4) How can the formal school system better educate more people of all ages in what they want and need to know? 5) How can jobs and training be matched to meet a society's need for economic growth and to prevent widespread unemployment. So these are the five areas that we focussed upon. Our observations and conclusions are given in the published report.* What I will do is to briefly point out some of the conclusions we can draw from the case studies, attempting to present a panoramic view that will give characteristics of higher education institutions for development.

The first question that we raised concerns the age of the institutions. "Are younger ones more development-oriented than older ones?" We found that this is not necessarily true. Even old institutions can be development-oriented — for example, the University of the Philippines which was opened in

*Thompson, K.W., *et al, op. cit.*

1908 and Thammasat University which was founded in 1933. When do older institutions become development-oriented? How and why? We found that development orientation of these universities took place in the late 1950s and in the 1960s when development problems generally came to the fore. At this time, in many countries in Southeast Asia, after attaining independence, and after a degree of consolidation following independence and the decline of colonialism (mainly in the late 1940s) the institutions became more development-oriented rather than remaining ivory tower institutions. This was true also for Thailand which although it had been nominally politically independent had been economically interdependent or dependent upon many Western countries.

We looked also at the cultural origins of higher education, and in the five countries that have been studied in connection with this report we found five distinctive mixes of the three cultural influences which operate on Southeast Asia: traditional culture, foreign culture intervention, and modern culture. All (except Thailand) had been colonized by different powers. They had different histories and had distinctive traditional cultures of varying strength. I shall not expand on this but what we concluded here was that independent of the cultural origin of the university and of the country, the university can be development-oriented. It depends largely on the leaders of that University.

Now, what about the amount of money, sources of money and the nature of assistance. In almost all the successful programmes that have been studied here we found that foreign support by USAID, the Asian Development Bank, the Rockefeller Foundation, the Ford Foundation, Colombo Plan, Commonwealth Scholarship and others had been crucial additions to local resources. Although small, they were crucial because usually we found that the support that came from outside was much more flexible than the support obtainable from the national government. When no foreign aid came, local sources of finance outside the institutions themselves were and are essential. So these findings imply that in addition to the regular resources of the university, "seed money" or some extra support is needed. The effectiveness of the assistance depends on the development of the cooperating institutions, on the source from which expert assistance comes, and on the absorptive capacity of the receiver. In my own experience, I have often used three models to represent the possible types of assistance. The first model is the "trial model" — the outside agencies bring in all the experts and the know-how to the local universities in Southeast Asia, and the people at the local universities essentially assemble the parts. We have seen many failures of the trial model in Southeast Asia. The opposite model is what I usually call the "desert model". In the desert model the developing country's officials pick out the best brains of the country when they are young and send them abroad to be trained in the United States or in Europe. These people are the best young plants available from the local land and when you bring the best young plants into the proper conditions, proper moisture, proper fertiliser and proper water they will grow quite well. After these young plants grow, we call them Ph.Ds., and we bring these Ph.Ds. back and transplant them in the desert. This desert model does not work either because conditions are

different. Therefore, between the desert model on the one hand, and the trial model on the other, one really has to play around depending on the stage of development of the country. This is what we have found, although we have not written it down in such detail. We found that in the trial model much aid in reality goes into the cooperating institutions in the aid-giving country rather than to the recipient. You can see what happens when you bring a lot of professors in — the cost of the professor is 80% of the total finance, and only 10% may actually be available for scholarships. One conclusion in this respect stands out in our various case studies — the greatest benefit is obtained from aid programmes when they have concentrated on the training of the local people.

Another question is "What is the role of the Government in respect of interaction with educational innovations?" It is obvious that the government should follow up worthwhile innovations and there should also be continuity in government support. We found out that in many cases where schemes had failed, this was because the government did not follow through long enough for local initiative, and local build-up to establish themselves without further support from external agencies.

The next question that we dealt with was the sources of innovations or reforms. How does innovation or reform come about and who initiates it? Development-oriented universities are usually led, spear-headed, directed, guided, whatever you call the term, by people. Who are these people? In accordance with the classical theory of innovation, the process of innovation consists of four steps: the perception of the problem, setting of the stage, the act of insight and the critical revision. In the postwar period the less developed countries have become aware of the problems of poverty and unemployment and the various manifestations of economic, social and political underdevelopment. This awareness has been the result of external no less than internal events. Unfortunately, the time elapsing between the perception of the problem and innovation can be considerable. What we have found is that change or reform always comes from individuals. Foreigners such as members of foreign aid agencies can introduce innovations based on others' experiences abroad but the key to success is in the hands of the leaders in the nation concerned. These leaders are usually to be found among persons with international experience gained through fellowships for advanced studies, international seminars, field trips, work experience and the like. So people with international exposure are usually the leaders for development.

There are other issues mentioned in our report. But in this brief discussion I will now go on to the broad conclusions or principles, namely the link between education and development. We found that it is the effective output of educated people who are development-oriented that makes the difference. It is they who innovate for development. It is not only development-oriented scholars but also administrative scholars who are needed. I can name one example here quite clearly and easily — he would be too shy if he were to be here today. One of the typical persons is Dr. O.D. Corpuz, an administrative scholar. He is a scholar in his own right as well as an administrator well-known in the Philippines and Southeast Asia. We also found on

the other hand that one local bureaucrat can interfere and frustrate development efforts even if there are plenty of right-minded scholars. A critical mass of such development oriented scholars and administrators is needed for aid to be effective, and therefore aid agencies should support the build-up of the critical mass. Here we address ourselves to the aid agencies. Some other comments we address to planners and administrators. Another conclusion that we can reach is in answer to the question, "How can effective programmes be strengthened, broadened, extended, replicated?" Here we found that flexibility should be built into an innovative educational programme. Sometimes a programme may be so rigid that it is not replicable. There is also a need for continuity of evaluation and modification of programmes. Manpower is required and therefore personnel resources should be developed. In other words, continuing and generous finance is essential.

There are some other issues that we tried to list, namely, the "do's and donts" in higher education and development, and they are set out in the published report.

In conclusion, I would suggest that our team has offered some empirical conclusions for higher education for development and its characteristics. What we hope to do next is deeper analysis into many of the case studies, and we also hope to extend the case studies involving cultural development. In addition, we would like to study further the various alternatives to the traditional processes of education, looking for alternatives to teaching in the classroom. What could these alternatives do for development? For example, we have talked quite a bit about the mass media type of education; what can this do for development? We would welcome your suggestions and comments.

HIGHER EDUCATION FOR DEVELOPMENT: FINDINGS OF CASE STUDIES

A DISCUSSION

Dr. **Makagiansar** asked Dr. Sippanondha for some expansion of his comment that well-trained people are often not recognized in their own national setting. Dr. Makagiansar felt that such people were not only recognized, but often too busy to undertake any more work.

Dr. **Sippanondha** replied that besides the non-recognition in the home country there was a constraint on the use of local experts imposed by the fact that when aid was given by donor agencies it usually brought along with it the visiting expert. Financial aid for schemes to be run by local experts was more difficult to obtain.

Dr. **Setijadi** stated that although in Indonesia returning scholars were used to the full they were often so dispersed that their impact on the situation was less than it might be if they worked in close contact.

Mr. **Rahman** spoke about tendency of donor agencies who want to control the activities which they were financing. He said that when a donor agency made stipulations these were usually based on experience either in the donor country or in another recipient country, and often they bore little relationship to the actual needs of the country to which the aid was given.

Dr. **Sippanondha** said that in his experience there was more success when the expert advisers from the donor country were personally selected by the recipient country, and this had been his experience in connection with aid from Ford Foundation, Rockefeller Foundation and other non-governmental aid agencies. But if the aid agency was governmental, and especially if it had a contract with certain universities, the personnel might be less suitable, especially in relation to the social and cultural environment of the recipient country.

Professor **Hamzah** directed attention to the need for the universities of Southeast Asia to give thought to the kind of scientific activity which they should go into. Many scholars returning from Europe or the U.S. were enthusiastic about what they had learned, but they did not think enough about the needs of the local situation.

Dr. **Sippanondha** acknowledged that the study which he had described in his paper had not included an investigation on the development of the indigenous scientific community.

At this point in the discussion, the Chairman asked Dr. Kenneth W. **Thompson** to speak about the investigation which he had directed and which had led to the publication of the two volume report, *Higher Education and*

*Social Change.** The investigation, sponsored by twelve national and international agencies had examined the interactions of higher education and development in three areas — Africa, Asia, and Latin America. Dr. Thompson's presentation in an abridged version is shown below:

The study which we made was in some measure unique, in that for the first time the donor agencies deliberately set themselves the task of listening to the people who are close to the problems. There are many shortcomings in our report. The time spent was too short, the research facilities were too small, and the number of case studies was probably too small. But it seems to me that we did achieve a sense of closeness to the problems, and I think that if people are really familiar with a problem they develop a knack of being able to size it up.

To speak of the implications of our study, I think that all of you will know that the study was made at a time which gave it profound implications for the future of international cooperation. For a variety of reasons there was a spirit of malaise, of doubt, of discontent, of scepticism about the benefits accruing from the billion dollar aid that USAID had given to education, and to higher education in particular. There was the question — and I personally wanted to know the answer — of how the World Bank would spend the 300 million dollars projected for higher education in the next five years. In some circles in which I sometimes moved there was a widespread notion that in fact there were few, if any, institutions of higher education anywhere in the developing world which were addressing themselves to urgent problems. The myth was widespread that what was to be found in most developing countries was an aggregate, a collection, of ivory tower institutions, largely patterned after colonial models, and doing little if anything about those urgent problems which we had chosen for enquiry in our study: food and food production, health and nutrition, jobs and employment, cultural development and assistance to the rest of the educational system.

In the end, if our study did nothing else, it seems to me that it did demonstrate that a percentage of higher education institutions in the third world were doing something significant about at least some of these urgent problems. It provided a further interesting lesson for me — even for the U.S. and other developed countries — that some of the advances that have been made (for example, in the work study area) in dealing with the third world, are applicable also in the U.S. I would like to repeat again the words which Dr. Pusey wrote, and which I quoted in my introduction to our report. "We have been taught that the primary duty of students is to study, in order to render service to society. But, in fact, service itself has become study *par excellence*, and the simple truth is that a circle exists — study for service, service for study." Thus one has come round full circle in terms of the efforts being made in some of the developed countries. I think that phrases like that, growing out of the study here, have helped to deal with the problems of malaise and scepticism in the developed world. They have helped to deal with the feeling that nothing had been done, and with the fear that the billion dollars from USAID and all the other efforts might not have really helped the people in the developing countries.

* Thompson, K.W., Fogel, B.R. and Danner, H.E. (1977), *Higher Education and Social Change*, Praeger, New York.

Another thing that seems to me to be of the utmost importance is that to a certain extent the ultimate test for the donor agency has very frequently been, in the past, the approval and the judgement offered to an educational institution by a recognized Western institution. One of the hopes present at the origin of our work was that in a study invited by the twelve big donor agencies which had provided the bulk of the assistance to higher education in the developing countries, the weight of the findings by a jury of people within the region themselves might help to legitimize and to call attention to the worthwhileness of significant efforts in the various regions. This effect was seen. One of the most exciting health science programmes we looked at was the programme in Cameroon. One of the features of this is the common training, from the very beginning, of technicians, nurses and doctors, who share the same basic curriculum. It is not considered undignified for a doctor to be trained alongside a technician, for not only are they trained side by side, but they are going to the field side by side and will continue to work together. Dr. Morocoso, the Head of the Programme, said that up to that time he had always needed legitimation by Johns Hopkins or Harvard Medical School or by London University — from the outside. But now, with judgement passed on this African venture by a group of outstanding African educators within the framework of an international study, it would become much easier for him in all his discussions; he would be able to point to the fact that an authentic and indigenous African jury had given judgement on the Programme.

I think this is one aspect of the project which is important for the donor agencies. Not only I, but almost everybody I have known in foreign fields, has read a great many reports on the way from an institutional research centre to the airport! People has zoomed in, spent a day or two, become masters of the subject, and have departed with a whole mythology, literature, folklore and gossip — the kind of thing you can collect in any institution — and this has gone into their reports. This is not to say that there are not outstanding people who have been valuable, and whose opinions can be valuable in the future. But a great deal of moral pretension has injected itself into the situation, especially when westerners have tried to enter and evaluate the institutions of non-western society.

The three regions of our study — Africa, Asia and Latin America — are at quite different stages of development. Africa, it seems to me, stands at one point of the spectrum, Latin America and Asia at another point. In Africa, the need for various forms of political and social educational innovations is enormous — because of the magnitude of the problems. Poverty, scarce resources and other difficulties all have to be dealt with by a cadre of as few as two or three university graduates. There is little wonder that African countries have not committed themselves to the same systems as the Asian and Latin American countries. There is less concern in Africa over the integration of government and university. Often there is constant movement back and forth between government and university, and there is in effect an equating of government interest, goals and personnel with university interest, goals and personnel. In Latin America on the other hand there was great concern over possible domination of the universities by the government — concern lest the government dictated action, research programmes, or selection of

personnel, so that in fact the university might become the tool of a particular political party. So there is a difference between Africa and Latin America, and I suspect there may be differences also between the countries of the Southeast Asian region. With reference to our case study of the Philippines, some economists have expressed concern over the effect produced in the Philippines by the very large number of graduates. But at least in the case study of the Development Academy of the Philippines our team were of the opinion that this large production of graduates meant that there was a large body of trained people available, who could be drawn on immediately for the development of the Academy. Similarly in the case of the Asian Institute of Management and the Centre for Research and Communication the existence of a pool of trained people was of great value.

The Asian report presented, perhaps in an extreme way, the view that even if experts are over produced in a given field, this will in the long run not be economically costly, because once the overproduction has reached the point of driving out the expatriates then the pay level will be driven down and operation can continue on an economical basis with local personnel.

The last thing that seems to me to be worth saying is that — not today, and not tomorrow, but perhaps one, two or three years from now — the existence of our two volumes with detailed assessment and evaluation by national scholars on what is going on in the educational system will, I think, help and have an effect on those who give support to education in general and higher education in particular. The report is a record of quite significant achievements and genuine innovations in institutions of higher education in the developing countries as assessed by the peers of the academic innovators. What one would hope is that the work will go on.

Dr. **Boonserm** asked about the variations among the seven Southeast Asian institutions which had been studied.

Dr. **Sippanondha** replied that further study would be necessary to cover the many different types of institution, but that he did hope that the study, within its present limits, would still be useful. He hoped that the study would help university professors and administrators to be more aware that the role of the universities is not purely academic, but also to be useful to society.

With reference to the case study of the University of Gadjah Mada, Dr. **Makagiansar** pointed out that although Gadjah Mada was the first university founded after the establishment of the Republic of Indonesia, the constituent colleges of the University of Indonesia were established much earlier.

Dr. Makagiansar could not see that there was any "clash of cultures" in Gadjah Mada. He could agree that there was "a search for identity", but neither in Gadjah Mada nor in any other Indonesian university had he been required to resolve any clash of cultures.

Tan Sri **Ainuddin** felt that a university by its nature should be the university of society in matters of thought and development.

SUMMARY DISCUSSION

One topic which was discussed was the old issue of "academic freedom". One participant discussed the connection between training for work and training for thinking, and put forth the point of view that there is no longer a dichotomy: we must teach the student to think if we want him to work intelligently. Another speaker stated that it was no longer the juxtaposition between thinking and training, but it was the juxtaposition between state control and university thinking. He declared that if there were too much control, the students and faculty would stop independent thinking in public and might go underground.

Another discussion was on the relationship of higher education to culture and values. There was a suggestion that universities in the region had a duty to provide moral education. It was also suggested that values should be regarded, not only as something to be inculcated, but also as a subject of study.

At different points in the discussion the similarities and the diversities of the countries of the region were noted. The problems of the different countries of the region were seen as being related to their very different mixes of multi-racial, multi-cultural, multi-lingual societies. The point was made that Southeast Asia had something special to contribute here. The discussion cautioned that some of the generalizations which had become standard tokens of exchange in analysis and discussion were misleading. These were assumed often to be useful, but perhaps this was not so. What was needed was further investigation and a willingness to study the particular situations existing in each country.

Another aspect discussed was the problem of the rural areas, which was shared by the countries of the region. The success of the universities involved in the Mae Klong scheme in getting graduates to work in the rural areas was mentioned as an example where Southeast Asia had something to show to other countries. A participant spoke of the possible ways of spreading the theoretical knowledge available at the central campus of the university to reach the provinces and the rural areas. The benefit of university service to the rural areas was seen as something which would not only help the rural people, but would also help the students and young graduates. It was said that work and the practice-oriented or practical approach was a good way for the undergraduates and graduates to achieve both knowledge and wisdom. On the more general question of how to provide higher education for the people — both rural and urban — who do not now have access to it, there was discussion of the "Open University" method using the mass media. It was said that an "Open University" on the pattern of the British venture at Milton Keynes was too expensive for the Southeast Asian situation. There was also the question to be considered that a widely "open" university could possibly generate unmanageably large numbers of graduates, and would thus not find favour with governments, to whom these people might then present themselves as a problem group due to lack of employment.

When the chairman called for proposals of possible topics for future RIHED seminars there were several suggestions. One was the topic of the financing of higher education in the region. Another suggestion was that RIHED should make a study of innovative approaches geared to national goals and needs. Another suggestion was that RIHED should study the efforts of Southeast Asian universities to develop their indigenous academic community in natural and physical sciences. The discussion in the seminar had suggested that many universities were putting much effort into development and staff upgrading in humanities and social sciences. The time seemed opportune for more attention to be given to indigenous scientific activities.

Another field of endeavour which was suggested was the development of reading materials and textbooks in indigenous or national languages. Another speaker expanded this proposal to include teaching materials. He pointed out that whereas in the social sciences and humanities the material studied would be different in each country, the material of the science curriculum would probably be the same or at least similar. This would therefore be a suitable project for regional cooperation. He linked textbooks, materials and curricula. In relation to the field of community health a participant spoke of the special need for cooperation. He went on to explain that whereas there are textbooks on most necessary topics, there is a lack of manuals "on how to teach our own students". His suggestion was that with the help of RIHED the experts in each country of the region could cooperate to produce such manuals.

APPENDIX I

HIGHER EDUCATION AND NATIONAL DEVELOPMENT: ASIAN REGIONAL REPORT

Development is very often viewed as a state or condition that has already been attained, as when, for instance, one speaks of "developed nations." Perhaps this view of development is biased in the direction of material or economic performance. Economic efficiency is, of course, an important aspect of development, for it attests to a culture of performance, innovation, and organization. Nevertheless, human communities are not merely machines for producing material objects and related services. A human community is an association of human beings and the condition of development cannot, therefore, be rightly viewed except in terms of human welfare or well-being. Indeed, there are instances of nations which are conventionally regarded as developed where the quality of human life or well-being is threatened by degradation of the natural environment, serious inefficacy in the social control of production technology, inequity in the production and sharing of the national wealth, and unsolved ethical or moral difficulties in the living together of heterogeneous populations.

And so it may be wiser to regard development as a process rather than as an attained stage or condition. In this view, development is necessarily a continuing situation. All the nations on the planet are at some stage of development in this process, although the course of development is not simplistically uni-directional, due to the vast range of aspirations—and constraints—amongst the various nations.

But even though the development process is not uni-directional, it is not confused and undefinable. Our view of development includes three elements. Briefly stated, it is the process of increasing firstly, modernization of the economy (that is, the production of wealth and the efficient use and management of resources, modernization implying intelligence and technology for optimum returns from resources and effort); secondly, the efficacy of social mechanisms in the management of consensus and conflict, and thirdly, the paramount objective of securing, improving upon, or adding to human well-being in relation to the environment.

Modernization requires the use of appropriate-and-efficient technology; it, therefore, implies an openness of mind in the choice of methods and tools, whether "hardware" or "software." Thus not only the economy but also the society as a whole should be modernized, of course, in the context of the nation's cultural values. Social efficacy means that the community is not helpless and can decide and act in the face of social crises. And our view of development requires that the ultimate test of national performance is human well-being.

We take this position on human well-being for obvious reasons. Perspectives such as 2,000 A.D. and Spaceship Earth compel us to be concerned over the future of the planet as the habitation and house of

humanity. We are concerned over the condition of the planet because we are concerned over the condition of humanity. Global concerns about the problems in food, population, and energy touch all nations. Nearer to home, the unrest in the 1960's and continuing into the present by the young adults who constitute so much of the populations in the LDC's and especially Asia, and who will be the leaders of the 1980's, have focused attention on the fundamental issues of justice, morality, human dignity, and liberation. These issues are the essence of human well-being.

Our solicitude for human well-being does not imply that we ignore other imperatives, for we consider that the goal of well-being encompasses all spheres of human activity, including those which are outside the individual as such, as for instance the status of the nation and what the nation believes to be its appropriate international relationships. Human well-being is relative and a balance of various factors, individual, national, and international. To achieve it, of course, requires compromise, but compromise cannot be carried beyond a point; for example, the nation's leaders cannot go too far in the pursuit of international power to the neglect of human well-being. If the decision-makers are oriented to well-being, they will stop at the right point.

Higher education and development are appropriate approaches towards the increasing capacity of nations to produce more of those material goods that make human life pleasant and rewarding, but they must also reinforce concern for justice, morality, and human dignity. Higher education and development must likewise be regarded as approaches toward the liberation of people from the constraints—for example, in health, ignorance, poverty, unemployment, run-away technology—that prevent them from becoming the truly human beings they are meant to be by their human nature.

The various nations on the planet are assumed to be pursuing the transcendent ideals of humanity in their own ways, through structures and processes that reflect their different histories, cultures, values, and capabilities. Some will perform better than others. But most nations have poorer classes, to whom they must address special efforts in order to lift them to the level of the more comfortable groups. Many countries have environmental problems which they must solve. And all or almost all have problems of inequality in the distribution of the material fruits that economic efficiency produces.

Because human well-being is for all people, development must be measured in terms of the degree that each nation attains and secures it for all those who are in the national community. The fullness of development is attained only when the well-being of every member of the community is achieved and assured.

Reflecting this expanded view of development is the companion concept of *social accounting* as a measure of national performance. It is very well to define or prescribe goals or performance targets, but without a measure confusion easily sets in even on the issue of the goals themselves. On the other hand, the measure adopted, if not in harmony with national goals, has

a tendency to draw efforts towards satisfying the measure rather than achieving the goals. (An example is GNP; if GNP is the measure of performance, production levels tend to be stressed, resources wasted, and distribution of wealth understressed.) It is, therefore, suggested that a social accounting system can be very helpful to a development effort.[1]

Inasmuch as higher education is not or ought not to be viewed as mere training for skills, but must include experiences or insights in decision-making in human values, a social accounting system which places emphasis on the production and distribution of the values of development is a natural focus of consideration in any study of higher education and development.

One *caveat* is necessary in most discussions of higher education, or education for that matter, in relation to grand or large societal objectives. This is, that *formal education* alone cannot bring about, for example, social reform, enlightened electoral decisions, increased productivity, national unity, justice, and so on. Even if the entire formal educational system were designed and operated deliberately to achieve these societal goals, the prospects of success are sketchy at best. The reason, of course, is that not only formal education but also a broad range of non-formal educating agencies such as the family, civic associations, the churches, and the political parties, as well as the other great institutions of society such as the unions, government itself, and economic institutions, must be working in coordination in order that these large goals be attainable.

For instance, even if higher education were oriented to social justice or comprehensive economic planning, there would be little or no advance if the government itself did not deliberately pursue those objectives. Thus, there must be a degree of consensus in the society about problems and/or objectives, a political will to face those problems and pursue those objectives, and a degree of efficacy in government in the articulation of the society's efforts (through the key institutions) towards meeting its problems and goals.

The university is the traditional seat of higher education, and whether in the advanced or the developing countries, the classical role of the university—to preserve, transmit, and increase knowledge—cannot be neglected. Moreover, in the developing countries of Asia, many of which did not have

[1]A basic "Social Indicators" scheme, as most social accounting systems are called, involves adoption of a list of "areas of social concern," each of which is deemed necessary to individual and community well-being. Then statistical indicators are devised to measure national performance in each area, for example: health and nutrition; learning and skills, income and consumption; employment; capital and non-human resources; housing/utilities and environment; public safety and justice, social mobility, and political values. The result is a composite measure of how well or poorly the nation produces "net beneficial product" or "net national welfare" or some similar well-being aggregate. The NBP or NNW can be disaggregated to indicate how regions or income classes, for example, are faring. Thus Social Indicators likewise measure distribution of values. A practical policy application of the system would be the stipulation of a target of X per cent GNP increase with the proviso that a significant portion of the increase (say, upwards of 50 per cent) goes to the lower-income families (say, families earning less than a certain annual income).

scholarly traditions, these functions must be pursued more assiduously than ever as part of the process of raising the level of the nation's intellectual and, therefore, economic, political, social, and cultural development. Because of pressures from the government and the society, the scholars in the university may be forced to devote their research efforts to immediate problems, but even in a developing country basic, fundamental research must be carried out, for this in the long run may be more important to public needs. A university's commitment to intellectual excellence is its primary and most significant contribution to a developing nation.

Nevertheless, universities in today's circumstances are compelled to be more than ivory towers. The land grant colleges in the mid-Western United States more than a century ago showed the way for their counterparts today in the developing countries, through their efforts in public service and extension work. To the three earlier functions of the university must, therefore, be added that of attention to the needs of the community and the nation.

Much as universities are crucial to national development, it cannot be forgotten that higher education takes place in other venues, such as colleges of lower than university status, technical schools, community colleges, academies, and special institutions of various sorts. Moreover, post-secondary education can take place through so-called non-formal education, that is, extension courses, short training programs, radio and TV series, and so on.

In our view, both traditional and non-traditional institutions of higher education must become instruments of national development. The objectives to which higher education must respond have both national and international dimensions and these may be briefly stated as follows:

1. National Objectives
    a. Focus informed attention on the most serious national problems;
    b. Strengthen the capacity to solve urgent local and community problems, such as food and nutrition, health and environment, employment and human resource development, housing, planning, urban in-migration, and equity;
    c. Broaden and strengthen the indigenous capacity to absorb and advance science and technology for development; promote accumulation and transfer of skills; and
    d. Enhance more effective and intensive dissemination and application of existing knowledge as well as art and culture.
2. International Objectives
    a. Promote national integration—the nations of Southeast Asia have moved ahead since the grant of independence in the 1940's and 1950's. On the whole, therefore, consolidation of independence has been superseded by the quest for national integration;
    b. Improve the country's position in the international division of labor;

c. Develop capabilities to deal with international problems such as the monetary system, scientific problems with worldwide sources of knowledge, the environment, and so on; and
d. Foster understanding or make possible participation in international dialogs on issues of human well-being and enable the LDC's to make more effective contributions to the world community of nations, for example, through cooperation at the bilateral, regional, and international levels.

The Southeast Asian Region

The Southeast Asian region, which is the locale of the case studies presented here, consists of 11 independent nations running from the Philippines in the East to Burma in the West. In this part of the world, 283 million people lived in 1970, with per capita GNP ranging from as high as $1075 in Brunei and $844 in Singapore to $96 in Indonesia and $78 in Burma. This is neither the most populous of the regions of the world nor is it the most backward in terms of national development. The five nations of the Association of Southeast Asian Nations (ASEAN) are perhaps at this stage of time the most developed and the most homogeneous grouping in the region. Indonesia is the largest in area and population—1.9 million square kilometers on which 120,000,000 people live; it also has the lowest per capital GNP, $96. The leading island of Java is densely populated (70 million people), but the outer islands are sparsely populated. On the other hand, Singapore encompasses 2.2 million people in an area of 580 square kilometers and has the highest per capital GNP at $884. In between are Thailand: 40 million people in 514,000 square kilometers and earning a per capita GNP of $210; the Philippines: also 40 million people in 299,000 square kilometers and with a per capita GNP of $240; and Malaysia: 12 million people in 332,600 square kilometers and enjoying a per capita GNP of $400. It appears that in Southeast Asia the larger the area of the country and the population the lower the per capital GNP—although, of course, the relationship is more complex than that.

Except for Thailand, the Southeast Asian natipns were ruled, up to the post-World War II period, by metropolitan powers from Europe and North America. Even Thailand, though nominally independent, was subject to external pressures from the outset of the colonial period, hemmed in as she was by territories ruled by outside powers. From the second half of the nineteenth century to the Second World War, Thailand was within the sphere of influence of the United Kingdom. Under colonial rule, cultural ties were built up in each country with the political suzerain and for good or ill, many aspects of the culture and institutions were implanted or were picked up. This holds true for education, which explains the diversity in educational system, outlook, and experience of the different countries.

Some Considerations on Higher Education in Southeast Asia

Two cross currents seem to be in action in regard to higher education in Southeast Asia. On the one hand, the populace seems to aspire to higher

education as they see in it, rightly or wrongly, the key to a better life. This aspiration is probably most intense in Indonesia, but it is also powerful in Thailand and continues to be strong in the Philippines where for more than three generators, with the establishment of a system of mass education in the American colonial period, education has been very open.

But on the other hand, governments are determined to control and limit higher education—as in Singapore and to a large extent, too, in Malaysia and in Thailand only in a lesser degree. The elitist view of higher education is probably a carryover from the colonial era, especially under the British. But it is also justified by these governments on grounds of efficiency—to get the best return on the government's expenditures, to direct the work force in directions where it is needed, to avoid the problem of educated unemployed. It also arises because strong governments are loathe to have to deal with large groups of students and intellectuals, who are often an intractable group.

What should be the choice between this yearning for higher education and the government's view of "efficiency"? The fact of the matter is that despite occasional government pronouncements on restricting higher education, enrollments have been going up at a rate faster than that of the increase of population. Given the many tasks of development and the pressing need for trained people, it is very difficult to escape the mounting necessity for higher education.

Of course, we do not have in mind that everyone in the population should be or can be a Ph.D. There are many types of post-secondary or tertiary education other than scholarly or professional training. Furthermore, a great diversity of institutions and methods, and not just universities, can be used to carry out the work of higher education. Likewise, we appreciate that government restrictions on enrollment may, as in the Philippines, be aimed at raising the quality of tertiary education where there is already large enrollment at the college level. It is well known that, while there is efficiency and innovation in higher education in Southeast Asia, great inefficiencies also exist which cannot be overlooked.

One of the striking lessons in the economic development of those nations which today are considered advanced is that the highest payoff in the wide range of areas of investment has been investment in education. In the Asian region, Japan's economic and national development in the late nineteenth and early twentieth centuries has been a vivid illustration. The pivotal role of education is easy to appreciate, for it is people who develop a country. There is still another lesson: that education for national development is a task of generations.

Except perhaps in a recession or depression, a progressive modern society needs all the trained people it can get. It is not only top level professionals and managers who are required; a large host of competent supporting staff as well as persons of varied skills must also be available. The requisite numbers of such people are difficult to estimate because the

quantitative relationships between growth and requirements of trained manpower cannot be derived from the historical experience. Although attempts are being made to develop "social indicators," at present we have still a long way to go to devise a precise link between the social indicators and the necessary numbers of higher level trained people for specific development tasks. Nevertheless, for LDC's, the more trained people there are, the better the prospects of developing the society (not just the economy).

There there is a shortage of trained people in Southeast Asian countries is shown in an economic measure: the relatively high compensation which the qualified professionals command and the multiple differential between their salaries and the wages not only of the unskilled workers but even also of those with some higher education such as white collar workers and teachers. There are countries where the pay is enough to attract expatriates even from advanced economies. This is paradoxical as well as unhealthy for a developing country with per capita incomes way below those in advanced countries. The reliance on expatriates detracts from another desideratum for most developing nations, namely, intellectual and technical independence through a strong and adequate indigenous professional and technical class.

It should be noted that in many developing countries today there is a large mass of educated unemployed and tendencies towards emigration of skilled professionals, such as doctors. This is true especially in some economies in Asia which for various reasons, including government economic and political policy, are growing very slowly. But the Southeast Asian countries are not generally in such a dismal position; growth rates have been at least satisfactory and in some cases gratifying indeed. Furthermore, the evidence, say in the Philippines, is that the problem of educated unemployed contains large elements of illusion: the great mass of unemployed are those looking for their first job and once they find that job, they tend to be relatively permanently employed. Or else many of the unemployed college graduates, because they come from higher income strata, choose to stay out of employment longer until they find what they consider satisfactory positions.

The surpluses of trained people in certain fields do indicate imbalances and inefficiency in the educational effort as well as inadequate government policies to absorb the output of the educational system. We do not deny that the directions of effort in higher education should be related to the manpower needs of the economy—for example, for more technicians rather than too many graduates in non-directly "useful" areas such as humanities. However, it is our feeling that the state of educated unemployed in Southeast Asian developing countries is a temporary stage in development. The fact is that there are, in all the Southeast Asian countries, shortages of manpower not only in areas calling for sophisticated modern technical skills, let alone managers and entrepreneurs, but even in such positions as stenographers, clerks, and office superintendents. Under these circumstances, it is certainly better for long-run development to push farther away the limits or

bottlenecks to growth by having reserves of trained people rather than a shortage.

There should be no fear in an economy which is growing satisfactorily that as increasing masses of the work force become more qualified, there will be problems of placing them. For the fact is that as the qualifications of the available work force rise, employers, too, raise their qualification standards for a job; they will require no longer mere elementary school graduates but now secondary school graduates, and so on.

For the development of the economy and society, a critical mass of "leader elements" is needed. These are the entrepreneurs, the intellectuals, the professionals and managers, and the political leaders—the last being those who provide the nexus between popular aspirations and concerns on the one hand and government programs and national policy directions on the other. The lone charismatic Leader-Hero and his personal supporters cannot bring about national development without managers of development programs and projects, without entrepreneurs of economic undertakings and of intellectual enterprise, without the support of politicalized elements that feel the popular pulse and channel feedback to the top leadership. It is obvious that the nation produces this critical mass primarily through higher education. But higher education must produce not only "leader elements" in a number that will support a particular political regime; it must likewise produce additional numbers from whom come the groups and individuals who provide the nation with alternative policy directions, management concepts, and resource allocation/distribution schemes. The availability of these incremental numbers of "leader elements" is not a luxury but a necessity for development, for they contribute not only to the efficiency of public and private management but also to the openness of society.

One of the goals of modern-day policy is egalitarianism. Education is a potent democratizing element. The more people who are educated, the more people there are who share a common experience. This cannot but lift the level of humanity in the population and strengthen the society.

The egalitarian effect extends as well to material measures of well-being, that is, the distribution of income in the society. In the first place, higher education is one of the most effective ways of promoting inter-generational social (and therefore, also economic) mobility. Furthermore, as the supply of professionals and qualified manpower increases, then the price (i.e. salaries) of these go down. At the other end of the scale, the supply of unskilled workers shrinks relatively, so that their wages go up. The narrowing of the income gap is a historical experience in today's advanced countries and is in fact one of the measures of degree of development.

But above all, higher education has a humanistic goal to justify it, even without the economic and political justifications pointed out above. Man is a rational being and higher education is a means to the fulfillment of human nature.

Some Conclusions

Now, perhaps a few more immediately pertinent questions may be examined in connection with the need to assist the improvement of higher education in Southeast Asia.

A. Concrete empirical conclusions

1. Age of institutions

a. Are new ones more development-oriented?

We have found that this is not necessarily true—even old institutions can be development-oriented. The University of the Philippines, which opened in 1908, and Thammasat University, which was founded in 1933, are examples. It is not the age of the institutions which matters; a new institution can just as easily be established to preserve as to change the status quo. Rather, what is crucial is that development problems become more important or prominent, so that the institutions can no longer ignore the situation. Older institutions have created new programs to cope with the specific problems; in so doing, they either set up new organizations or reorganized.

As for the new institutions, they have responded of necessity to the demand and in some cases the institutions have been set up precisely to cater to the need. In other words, a cluster of external factors have been instrumental in influencing the response.

b. When do older institutions become development-oriented?

How and why?

The development orientation took place in the 1950's and the 1960's, when the circumstances—the development problems—came to a head. The time was after independence. After a degree of consolidation following independence and the demise of colonialism, mainly in the late 1940's, the institutions became development-oriented. This held true also for Thailand, which had been nominally independent.

2. Cultural origins of the country's higher education system.

The countries that have been studied in connection with this report show five distinctive mixes of three cultural influences on Southeast Asia: the traditional cultures, foreign cultural intervention, and also modern culture. All but Thailand were colonized but by different powers. They had different histories and distinct traditional cultures of varying strengths. The motivations of the occupying powers in setting up the educational systems and especially the universities

during the colonial period were diverse. The colleges in the English colonies were for the production of well-trained and highly paid public servants, rather than executives for the private sector. In addition, the educational patterns reflected the differing cultural origins of the political suzerains; for example, the Dutch and English tended towards the Continental European system of higher education with its emphasis on specialization in university education, as well as elitism, and Thailand, which was oriented towards England, was greatly influenced by that tradition when Chulalongkorn University was established. On the other hand, the American colonial administrators in the Philippines took the charters of the land-grant colleges of the mid-Western United States for their model when setting up the University of the Philippines; this University has, therefore, had a longer tradition of public service, professional training, and mobility of staff among the academic, government, and private sectors.

In the development of newly independent nations, there is a stage when there are still strong cultural and economic links with the former metropolitan power. Then later the people begin to imbibe modes of thought from other countries; for example, the Indonesians, who were under the Dutch, have become more aware of and appreciative of American culture.

It should be noted that cultural influence was two-way; for example, many American universities became more development-oriented after their staff came to this part of the world, as Fulbright grantees, on AID programs, and so on.

3. Amount, source, and nature of previous assistance.

In almost all the successful programs that have been studied here, foreign support—by U.S.A.I.D., the Asian Development Bank, the Rockefeller Foundation, Ford Foundation, the Colombo Plan, Commonwealth scholarships, and others—has been a crucial addition to local resources. Where no foreign aid came in (e.g. the Center for Research and Communication in the Philippines), local sources of finance outside the institution itself were and are essential.

The effectiveness of the assistance depends on the development of the cooperating institutions from which the expert assistance comes, no less than the absorption capacity of the receiver. And just as the program depends on both parties, the aid confers mutual benefits.

Nevertheless, the aid relationship between donors, cooperating institutions in the donor countries, and recipients does not remain static, but evolves from one stage to another. The capacities to assist on the one hand and to receive on the other change as expertise gets transferred over the years. The aid requirements of Southeast Asian countries in the 1970's are different from those in the 1950's and

1960's. Not only is the level of technological development and sophistication generally higher now in Southeast Asian institutions of higher learning but so is their intellectual independence, their confidence, and their ability, as well as desire to make decisions for themselves. In the face of such development, much of it brought on by successes in past aid efforts, aid givers cannot maintain the same attitudes and programs, but must search for new ones or, better still, press the recipient countries to frame their own plans and requests for aid, to which the donors will respond.

Nevertheless, in the accounting for the amounts of external assistance given, we believe the figures should be properly deflated. So much of the aid in reality goes to the cooperating institution in the aid-giving country, not the recipient, and this should be placed in perspective. Furthermore, it is important to avoid intellectual imperialism as well as academic pork barrel for the foreigners as well as the local recipients. Without attention to these and other aspects in the collaborative relationship, nasty reactions can be evoked in the long run.

One conclusion stands out in these various cases of aid: the highest payoff in the aid programs has been in training people. The example of the "Berkeley Mafia" in Indonesia—i.e. the economists trained in the United States in a crash program in the 1960's—is a vivid case in point.

4. Role of government and attitudes and interaction with educational innovation.

It is obvious that the government should follow through worthwhile innovation, and there should also be continuity in government support.

However, we believe that the government should not monopolize the development effort but should also encourage conscientious effort by private initiative. The entire nation should be mobilized for national development. No government has a monopoly of wisdom, inventiveness, and effectiveness in higher education and governments should not deny the society the benefits of private sector initiative. We are impressed by the results forthcoming—the imagination, vigor, and dedication—when government supervision and regulations are flexible, as in the Philippines.

It might be appropriate at this juncture to suggest that donor agencies review the national efforts in higher education, with the end in view of giving their support to governments which attempt to raise the quality of higher education as well as democratize it. We note that Southeast Asia governments generally have made higher education an expensive proposition, in the sense that in all Southeast

Asian countries except the Philippines, government expenditure per capita on higher education is higher (sometimes several multiples higher) than per capital GNP (See Table III). It might be considered fruitful in view of the increasing need for trained high-level manpower for development as well as the humanistic aspects already mentioned above, to assist governments which try to spread out the expenditure on education among a larger number of beneficiaries so as to help a larger number of the young people in the different countries. A complementary measure to this could be some redistribution of the financial burden towards affluent parents as well as sharing of educational initiative (in addition to finance) with the private sector.

5. Sources of innovation or reform. How does innovation or reform come about and who initiates it?

   In accordance with the classic theory of innovation, the process of innovation consists of four steps: the perception of the problem, setting the stage, the act of insight, and critical revision.[2] In the postwar period, less developed countries have become aware of problems of poverty and unemployment and the various manifestations of economic, social, and political underdevelopment. This awareness has been the result of external, no less than internal, stimuli as the domestic problems have called for attention. Unfortunately, the time lapse between perception of the problem and the innovation can be considerable.

   Change or reform comes from individuals. Foreigners, such as members of foreign aid agencies, can introduce innovation, based on their or others' experience abroad. Among the nationals of the country, innovation comes often, 'though not by any means exclusively, from persons with international exposure through fellowships for advanced study, international seminars, field trips, work experience, and the like. This shows the importance of assistance to individuals. As to the danger of 'brain drain'' from such assistance to individuals, in our view this can be dealt with by focussing on well-motivated individuals.

6. Role and contribution of faculties, interdisciplinary groups, university administration.

   It is not a faculty as a whole which acts to bring about desired change, but individual faculty members and administrators or small groups of faculty and administrators. It is a lamentable fact that faculties on the whole have not been a source of innovation. Role perception has an important bearing on this situation. Do the faculty

[2]Abbot Payton Usher, *A History of Mechanical Inventions*, Harvard, 1954, esp. pp. 523, 526. Schumpeter held similar views. Joseph A. Schumpeter, *The Theory of Economic Development*, Harvard, 1934.

members view themselves as scholars writing for the international world or do they want to address themselves to local problems? Again, in some societies, if a rare individual innovates, he runs the risk of ruining his career. Thus, much depends on how the individual perceives his role; the results are different depending on role perception.

7. Role of student bodies.

Unfortunately, in our observation students have had little direct effect on innovation or development orientation in higher education, as is perhaps to be expected from so young a cohort in the population. However, they have been instrumental in forcing good teaching by the faculty. Their indirect effect has been considerable, too; the students' social consciousness and their drive for progress have forced conservative faculty members to change or to innovate.

Today student groups are demanding greater participation in national policy-making in several Southeast Asian countries. The situation seems hopeful, but up to this point the constructive effects of such changes remain to be seen.

8. Costs and benefits of education for development and continuation of efforts from local sources once outside financing terminates.

We believe there will always be need for some form of external financing for the very important reason that it is often the most appropriate vehicle for innovation. The lessons from the case studies we have presented, that is, the catalytic and crucial role of outside finance, are instructive.

B. Broad conclusions of principle and doctrine.

1. The link between education and development.

It is an effective output of educated people who are development-oriented that makes the difference; it is they who innovate for development. It is not only development-oriented scholars but also administrator-scholars who are needed; a local bureaucrat can interfere with and frustrate development efforts even if there is a plenitude of right-minded scholars.

A critical mass of such development-oriented scholars and administrators is needed for aid to be effective and, therefore, aid agencies should support the build-up of that critical mass. The process takes a long time—at least ten or fifteen years. Equally important is to keep that critical mass intact, instead of allowing it to be fractured by outside pressures, the lure of higher pay and immediate tangible rewards, and so on.

2. How can effective programs be strengthened, broadened, extended, replicated?

   Flexibility should be built into an innovative educational program; sometimes a program may be so rigid that it is not replicable. There is also a need for continuous re-evaluation and modification of programs. Manpower is required, and therefore, depth in personnel resources should be developed. In a word, continuing generous finance is essential.

3. Should higher education for development be rural-oriented, not urban-oriented?

   We think this is a false dichotomy. Rather, we feel higher education should be modernization-oriented or development-oriented, with special attention to the structure, needs, and manpower of the country concerned. We do agree, however, that in the circumstances in which the LDC's are at present, more attention should be given to modernization of rural areas or those regions outside the metropoli or the primate cities.

4. How can international and national responsibilities be balanced? Membership in an international community of scholars versus orientation to local and national community needs?

   Again, we feel the dichotomy is inappropriate; the orientation should be not to *community* needs but to *development* needs. This is a concern of both international and local scholars. Then the categories become complementary.

   In this connection we believe there is a need for more competent and committed development-oriented scholars from the less developed countries who will have an impact on their counterparts from the developing countries. Fortunately, we foresee that this is coming, because while the scholars in the developed countries are talking about general problems of development, the scholars in the less developed countries are actively involved in concrete development programs and will, therefore, have substantial contributions to make from their experience. We believe the donor agencies could help promote dialog between these communities of scholars.

   We would like to point out that there is an increasingly important context in development, that is, bilateral, regional, and international cooperation. It is very much an active thrust in Southeast Asia today, which means that attention should be paid to this both by scholars and donors.

C. Do's and Don't's in Higher Education and Development.

   The development of higher education in Southeast Asia after

independence is now a responsibility of the government and the officials of the nation itself. National officials are very jealous of this responsibility, as well they might be. But if this is so, then it is important that the officials do their homework in regard to education in their own countries: think through the problems, make the plans, raise as much local finance as possible, and identify the areas where foreign aid is needed. Donor agencies should respect the prerogative of the national officials to determine their own requirements. With this approach, the donor institutions would not only be more effective in public relations terms but, in addition, would be in a better position to decide how to assist.

Another pitfall which should be avoided is the tendency to think of all LDC's as homogeneous and consequently to tend to transfer institutions and programs uncritically from one country to another. But it is obvious that countries differ even in Southeast Asia which superficially looks fairly homogeneous. It has been pointed out above that in this region there are different mixes of history, cultures, and institutions. In line with this, before they go to a particular country, foreign experts should try to equip themselves with some understanding of the local mores and culture which are often more sophisticated than might appear on the surface.

Furthermore, it would be helpful for donors to keep in mind the fact that a nation goes through different stages of development. This holds not merely for economic, social, and other areas but also as a consequence of educational development. Aid must therefore be programmed in terms of the present and future, not past stage of development of the country's educational system. Too often foreign experts think in terms of the 1950's or 1960's.

The types of technical assistance and expert advice needed by Southeast Asian countries in the 1970's are different from those in the earlier day. In the 1950's, the higher education systems of many Asian countries were rudimentary, whereas in the 1970's, the education systems are not only much larger but are also more complex and the numbers of qualified people locally available are greater. In typical Asian universities, for example, the number of expatriate Ph.D.'s is down, while the native Ph.D.'s are more numerous. Thus, foreign aid should take into account the manpower locally available. In these circumstances, the need is for higher caliber and generally more mature foreign experts who can guide and inspire the local staff. These visiting professors can stay even for short periods, but of course, longer visits would be preferable.

Finally, on the part of both locals and the aid givers, it is healthy to keep in mind that higher education, while it contributes materially to national development, cannot by itself bring about the realization of all the good things to which a nation aspires.

What Comes Next? The Role of Donors

The successes in integrating higher education and development, often

made possible by external assistance, are leading to "second generation" problems; that is, the efforts are being copied elsewhere and even in the original sites, the education programs have moved up to successive and sometimes more complicated stages. These problems, though certainly not unwelcome insofar as they denote progress, call for fresh efforts at solution. The donor agencies will still have a part to play in helping solve such problems.

At the very least, the aid institutions can help promote awareness of successful efforts to link higher education and development. Workshops and seminars are one useful form for disseminating such knowledge. We have already remarked about the beneficial effects of international exposure of individuals and learning from others' experience in triggering insights which lead to solution of problems.

We have pointed out the importance of outside donors in acting as catalysts in the development efforts and the value derived from foreign training of individuals. But we have a warning to make: while donors should have freedom to choose where they will put their money, it should be recognized that they have a responsibility, too, for through their fellowships and aid they can influence and improve or unbalance and distort the development of institutions.

The Case Studies

The case studies presented here have been chosen to reflect the diversity—in educational tradition, in attitudes towards the private sector, in approaches to mass education versus selectivity, and so on—in Southeast Asia as well as to be instructive. To some extent, the cases reflect the specific thrusts at this moment in history of the societies from which the cases have sprung. The case studies are not exhaustive; in all the countries in Southeast Asia, many imaginative programs are being carried out to link higher education with national development efforts. Nor is it implied that the cases are always unique to the countries which are the settings of the individual studies; for example, if Thailand has rural development projects carried out by students or Singapore is improving technical education, this does not mean that such efforts are to be found only in those countries, for in fact, it is not so. Rather, the programs were chosen in their specific locales because they were types which would illustrate for the region as a whole while retaining valuable local flavor.

Also, it should be noted that not all Southeast Asian countries are represented in the case studies. Finally, any conclusions to be derived from the studies may or may not apply to all countries or to the entire region.

The first case study deals with the normative role which an institution of higher education plays; that is, it examines how a university helps society define values and purposes and promotes these. This case is the University of Malaya, the oldest, the largest, and still the most prestigious in Malaysia. The country is a multiracial society making its way to national unity and the

University is a reflection of the society, in some ways in sharper focus than for the society as a whole. The case illustrates how this University cannot move faster than the society when the society cannot yet settle basic issues; the University of Malaya is responding to the demands of the society, rather than leading the society, as for example, in opening up more educational opportunities for Malays.

The next two case studies are of operational programs; that is, programs which apply knowledge to the solution of development problems; these are the studies for Indonesia and Thailand. Gadjah Mada University in Jogjakarta in central Java was the first university established by the Indonesian Republic. It is, therefore, looked up to as one of the leaders in university development; moreover, it is setting a pattern in cooperation with the government authorities in the region. Since it is not in the capital, Jakarta, it is less subject to the raiding of faculty and the pressures to serve immediate needs that the University of Indonesia is, and therefore, Gadjah Mada can develop as a university in its own way. But the study shows how the process of building up a true university takes time, perhaps even generations, in a setting which is not ripe for it; the seed cannot grow in unprepared ground and it must be nurtured carefully. Furthermore, Gadjah Mada illustrates a clash of cultures and educational approaches—the Indonesian oral tradition, the continental European university model, and the American land-grant college approach. Yet this university shows how even a young institution does engage in research and public service activities which make its other functions meaningful. It also vindicates foreign aid to universities, as it is precisely those faculties which have benefited from external assistance that are providing models for other faculties to emulate.

For Thailand, the case study is the Maeklong Integrated Rural Development Project, which brings together three of the leading Thai universities in an integrated effort at rural development. These are three institutions which have received assistance to strengthen their various competencies—Kasetsart University in agricultural sciences, Mahidol in medicine, and Thammasat in social sciences. Each of them has carried on extension and public service activities of its own, but now they have gotten together for rural development in the Maeklong region northwest of Bangkok. It is a pioneer effort both because of the inter-university cooperation as well as the multi-disciplinary approach in which a project team consisting of trained university graduates from differing disciplines lives in a chosen rural area. Furthermore, it is a departure from established modes of doing things, at least for Mahidol University, which is generally oriented towards American health care delivery systems. The effort is still experimental and unproven, but it is already a success in getting three strong institutions to carry on programs in a collaborative manner, strengthening each other in the process.

The training role of institutions of higher education, that is, programs which prepare effective contributions to national development, is brought out in the case studies for Singapore and the Philippines, two countries which are different in educational approach, but which are both doing commendable jobs within those frameworks. For Singapore, Ngee Ann Technical

College is examined in relation to the middle-level manpower training schemes of Singapore. Singapore has a tough-minded and rational government which has examined the country's manpower needs and has decided to emphasize technical level education more than university education. Ngee Ann Technical College accepted a downgrading of its status from a degree-granting level to a certificate level, and yet in so doing, it has actually lifted itself up by raising the quality of its technical education.

Finally, there is the Philippines, which among the countries of Southeast Asia has the most abundance of trained manpower. But it is not content with the present efforts and is expanding its offerings in graduate education, including the retraining of older and more experienced executives. It is also unique in the response of both the public and private sector to the country's educational needs. Three institutions which are engaged in manpower training for economic development for the public and private sector are described; both government and private efforts are considered. These are second-generation institutions in the sense that they build on a relatively advanced educational network and draw on a large manpower pool. They are the Development Academy of the Philippines, the Asian Institute of Management, and the Center for Research and Communication. All require from their students work experience either before enrollment or during the course of study. Different study programs are offered and as essential parts of their work, research and public service activities are engaged in, such as, in the case of the Development Academy, social indicators, human settlements, land use planning, and so on.

It is fair to say that in all the cases that have been studied, the institutions are veering towards the American land-grant model of a university. The leaders of the institutions have seen and have copied Western institutional models, and yet these innovative individuals remain persons true to their own cultures and nations.

The Asian Region Survey Team

The Asian Region Survey Team are an independent group chosen by the Regional Director for Asia, Dr. Puey Ungpakorn, to serve in their individual capacities. The work, however, was undertaken in cooperation with at least two semi-official organizations in Southeast Asia that are involved in higher education development, namely, the Regional Institute for Higher Education Development (RIHED), which is based in Singapore and the Association of Southeast Asian Institutions of Higher Learning (ASAIHL), with its Secretariat in Bangkok. In the case of RIHED, the cooperation was formally noted by the Chairman and Board of the Institute and with ASAIHL, the working relationship was with the Secretariat which made its research and publications available.

The members of the Asian Region Survey Team were the following:

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Table I

Basic Economic Data on Southeast Asia

	Total Area Land area including area under inland waters (sq. km.)	Mid-Year Population (millions)		Per Capita GNP (U.S.$)			Total Enrolment in Higher Education
		1972	1973	1971	1972	1973[2]	1970
Brunei	5,770	.12[6]	n.a.	n.a.	n.a.	n.a.	n.a.
Burma	678,030	28.87	29.56	80	90	90	45,891[3, 5]
Cambodia	181,040	7.15[1]	7.31[1]	130	120	120	11,094[4]
Indonesia	1,904,340	123.12	126.09	80	90	100	221,124[5]
Laos	236,800	3.11	3.18	120	130	140	517[3]
Malaysia	332,630	11.00[1]	11.32[1]	400	430	480	16,509[4]
Philippines	300,000	39.04	40.22	240	220	250	622,116[4]
Singapore	580	2.15	2.19	1,200	1,300	1,490	13,683
Thailand	514,000	38.53	39.74	210	220	240	70,997
South Vietnam	173,810	19.37	19.88	230	170	180	47,021[5]
North Vietnam	158,750	21.34[5]	n.a.	n.a.	n.a.	n.a.	n.a.
Southeast Asia	4,327,100	283.69[6]	n.a.	153[5]	n.a.	n.a.	
World	133,920,000	3,632.00[6]	n.a.	n.a.	n.a.	n.a.	

[1]Projected with the latest annual growth rate.
[2]Figures for 1973 are preliminary estimates.
[3]Public education only.
[4]1968.
[5]1969.
[6]1970.

Sources: *Key Indicators of Developing Member Countries of ADB*, Asian Development Bank, Vol. V, No. 2, October, 1974. *Progress of Education in the Asian Region*, Statistical Supplement, Unesco Regional Office for Education in Asia, Bangkok, 1972.

Table II

Public Expenditure on Education Around 1955, 1960 and 1967
(at current market prices)

Country	Year	Currency	As percentage of GNP	As percentage of total public expenditure	Recurring expenditure (thousands)	Teacher's salaries as percentage of recurring expenditure	Capital expenditure (thousands)
Burma	1954[1]	Kyat	1.8	...	...	...	...
	1960		1.6	...	110,564	89.2	1,208
	1967		3.0[4]	16.8	242,109	86.2	15,408
Cambodia	1954	Riel	1.7[4]	...	...	...	...
	1960		...	...	682,365	91.3	81,000
	1966		4.2	22.0	1,264,377	97.3	79,587
Indonesia[1]	1952	Rupiah	1.1[5]	...	600,500	...	312,000
	1960		0.7[6]	...	...	...	...
Laos	1954	Kip	...	...	81,800	81.0	17,000
	1960		...	...	186,000	...	56,000
	1967[2]		...	10.2	1,635,145	76.5	—
	1968[3]		...	9.6	1,529,370	74.3	—
Malaysia		Malayan					
Sabah	1954	dollar	...	...	...	...	...
	1960		...	...	6,346	88.9	3,253
	1967[7]		...	...	12,309	...	3,886
Sarawak	1955		...	...	5,311	...	806
	1961		...	...	12,266	82.3	3,432
	1967[2]		...	...	24,324	...	5,630
	1968[3]		...	...	25,030	...	3,869
West Malaysia	1954		...	...	80,305	...	11,929
	1961		3.4[1]	...	205,270	74.0	27,310
	1967		5.0	14.6	429,857	76.1	55,342

Table II (*Continued*)

Country	Year	Currency	As percentage of GNP	As percentage of total public expenditure	Recurring expenditure (thousands)	Teacher's salaries as percentage of recurring expenditure	Capital expenditure (thousands)
Philippines[1, 3]	1954	Peso	...	...	182,156	...	...
	1960		2.6	...	298,077	90.2	18,057
	1967		2.8	...	693,730	87.5	10,229
Singapore	1955	Singapore	...	...	...	...	...
	1959	dollar	...	...	59,978	84.5	1,571
	1968		3.6	16.8	146,797	80.4	8,933
Thailand	1954	Baht	2.9	...	816,000	...	11,000
	1959		2.5	...	1,129,875	79.4	104,124
	1968		2.9[4]	...	2,443,892	80.4	935,461
Viet-Nam, Rep. of	1954	Piastre	...	...	326,001	...	—
	1960[1]		1.0	...	796,000	...	50,000
	1967[1]		1.1	5.4	3,721,817	87.3	328,183

... Data not available.
— Magnitude nil or negligible.
[1]Ministry of Education only.
[2]Central (or Federal) Government only.
[3]Not including expenditure on the third level of education.
[4]As percentage of Gross Domestic Product at market prices.
[5]As percentage of Gross Domestic Product at factor cost.
[6]As percentage of Net Domestic Product at factor cost.
[7]Expenditure on public education only.

Source: *Progress of Education in the Asian Region*, Statistical Supplement, Unesco Regional Office for Education in Asia, Bangkok, 1972.

Table III

Unit Recurrent Costs of Education By Level in Southeast Asian Countries 1965
(in U.S. dollars)

Country	Per capita GNP	Unit recurrent cost in level		
		I	II	III
Burma	60	9	20	136
Indonesia	91	11	22	380
Cambodia	118	26	111	212
Malaysia (West)	269	43	82	1,146
Philippines	151	27	71	99
Singapore	544	60	78	674
Thailand	826	116	127	1,030

Source: F.H. Harbison, J. Maruhnic and J.R. Resnick, *Quantitative Analysis of Modernization and Development*, (Princeton, 1970).

APPENDIX II

PROGRAMME OF THE SEMINAR

Saturday, May 29, 1976

Session I – Opening Session

0845 – 0900	Welcoming Address by RIHED's Director
0900 – 0930	Opening Address by Chairman of the Governing Board of RIHED

Session II

0930 – 1000	Chairman: Dr. Puey Ungphakorn Paper: "Higher Education Development in the Past Decade" Speaker: Prof. Howard Hayden
1000 – 1045	Discussion
1045 – 1100	Coffee Break
1100 – 1230	Discussion

Session III

1400 – 1430	Chairman: Yang Berbahagia Tan Sri Datuk Professor Hamzah Sendut Paper: "Higher Education in Southeast Asia: Development and Prospects" Speaker: Dr. Ruth Wong
1430 – 1530	Discussion
1530 – 1545	Coffee Break
1545 – 1700	Discussion

Sunday, May 30, 1976

Session IV

0900 – 0930	Chairman: Dr. Emanuel V. Soriano Discussion on "Higher Education and Cultural Development" by Prof. Ungku A. Aziz
0930 – 1045	Discussion
1045 – 1100	Coffee Break
1100 – 1230	Discussion

Session V

1400 – 1430	Chairman: Prof. Phoon Wai On Paper: "Higher Education for Development: Findings of Case Studies (ICED-HED)" Speaker: Dr. Sippanondha Ketudat
1430 – 1530	Discussion
1530 – 1545	Coffee Break
1545 – 1700	Discussion

Monday, May 31, 1976

Session VI

0900 – 1230	Chairman: Encik Abdul Rahman Haji Arshad Summary Discussion

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